STEREO DOUBLE CASSETTE DECK

KX-W202/U/K-31

SERVICE MANUAL

IMPORTANT NOTICE

This manual has been provided for the use of authorized Yamaha Retailers and their service personnel. It has been assumed that basic service procedures inherant to the industry, and more specifically Yamaha Products, are already known and understood by the users, and have therefore not been restated.

WARNING: Failure to follow appropriate service and safety procedures when servicing this product may result in personal injury, destruction of expensive components and failure of the product to perform as specified. For these reasons, we advise all Yamaha product owners that all service required should be performed by an authorized Yamaha Retailer or the appointed service representative.

IMPORTANT: The presentation or sale of this manual to any individual or firm does not constitute authorization, certification or recognition of any applicable technical capabilities, or establish a principle-agent relationship of any form.

The data provided is believed to be accurate and applicable to the unit(s) indicated on the cover. The research, engineering, and service departments of Yamaha are continually striving to improve Yamaha products. Modifications are, therefore, inevitable and specifications are subject to change without notice or obligation to retrofit. Should any discrepancy appear to exist, please contact the distributor's Service Division.

WARNING: Static discharges can destroy expensive components. Discharge any static electricity your body may have accumulated by grounding yourself to the ground buss in the unit (heavy gauge black wires connect to this buss).

IMPORTANT: Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

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100189

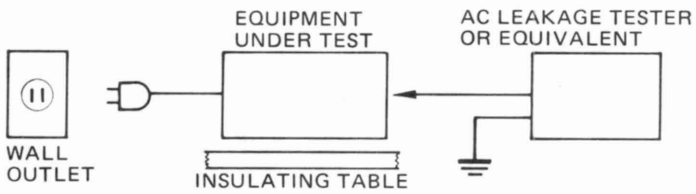
YAMAHA
YAMAHA CORPORATION
P.O.Box 1, Hamamatsu, Japan
3.2k-583 Printed in Japan. '88.1

■ TO SERVICE PERSONNEL

1. Critical Components Information.
   Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.

2. Leakage Current Measurement (For 120V Model Only).
   When service has been completed, it is imperative that you verify that all exposed conductive surfaces are properly insulated from supply circuits.

- Meter impedance should be equivalent to 1500 ohm shunted by 0.15μF.
- Leakage current must not exceed 0.5mA.
- Be sure to test for leakage with the AC plug in both polarities.

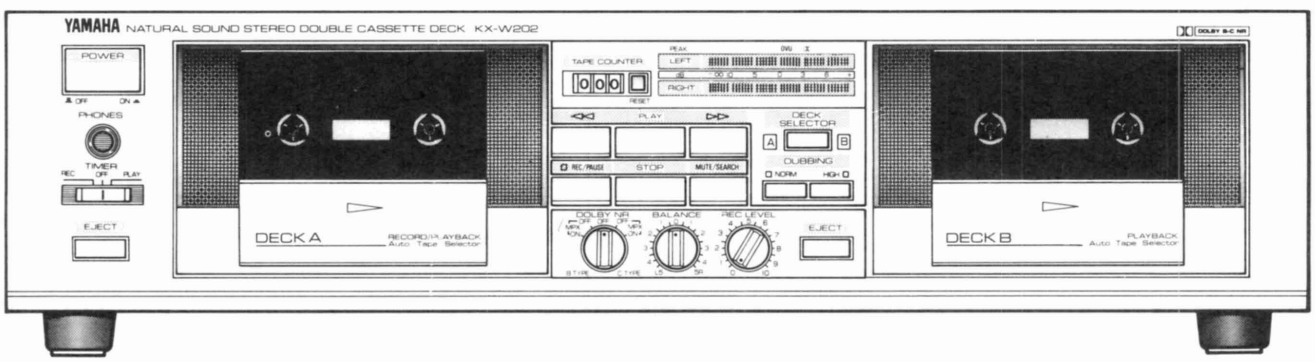


■ POLARIZATION (U, C models)

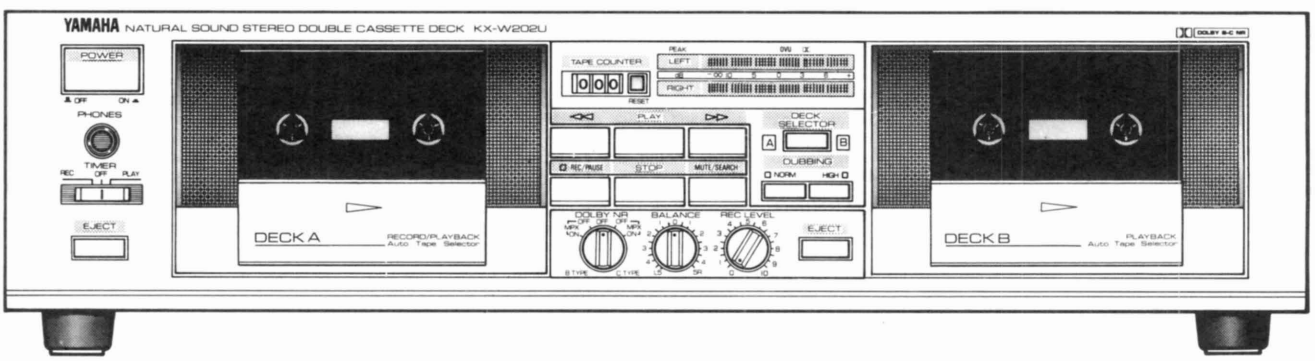
This cassette deck product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature.

■ FRONT PANELS

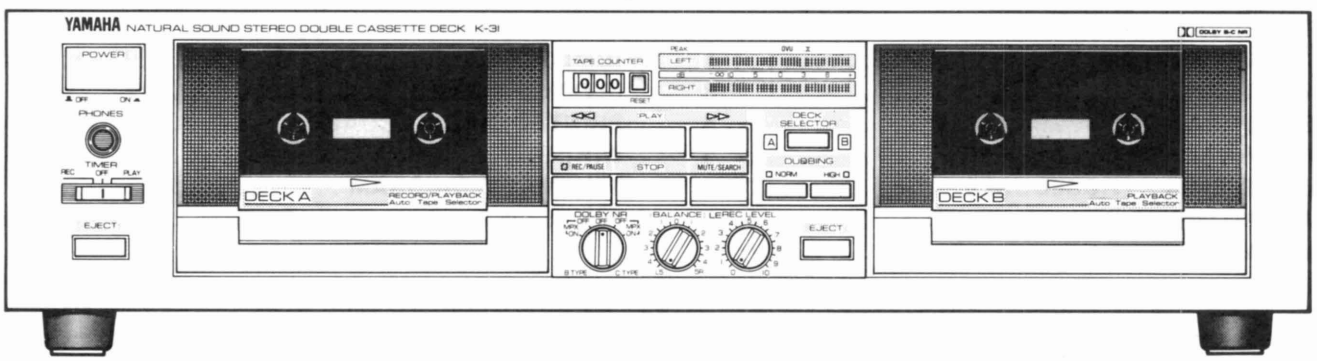
● KX-W202



● KX-W202U



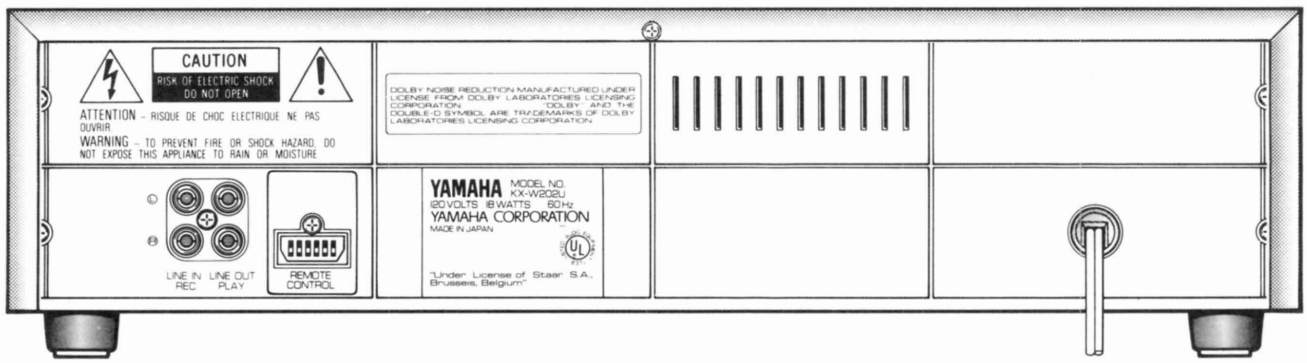
● K-31



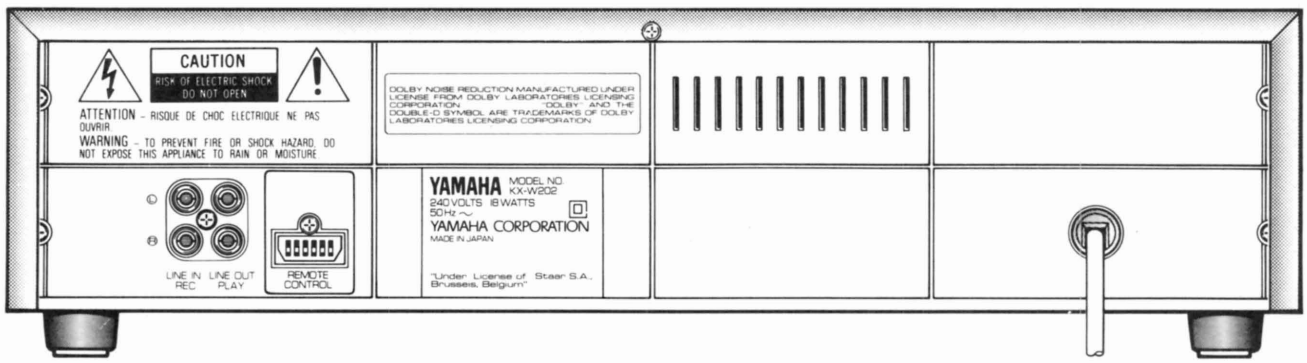
■ REAR PANELS

KX-W202

▼ U.S.A. & Canadian models


CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN
ATTENTION - RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR
WARNING - TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE
DOLBY NOISE REDUCTION MANUFACTURED UNDER LICENSE FROM DOLBY LABORATORIES LICENSING CORPORATION. "DOLBY" AND THE DOUBLE-D SYMBOL ARE TRADEMARKS OF DOLBY LABORATORIES LICENSING CORPORATION.
YAMAHA MODEL NO. KX-W202U
120 VOLTS 18 WATTS 60Hz
YAMAHA CORPORATION
MADE IN JAPAN
"Under License of Staar S.A., Brussels, Belgium"
LINE IN REC
LINE OUT PLAY
REMOTE CONTROL

▼ Australian & British models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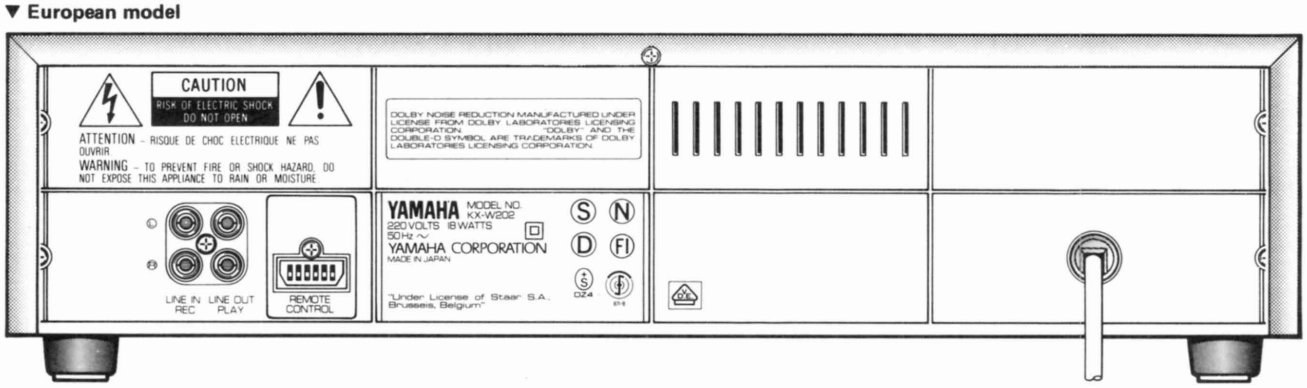
YAMAHA MODEL NO. KX-W202
240 VOLTS 18 WATTS
50Hz ~
YAMAHA CORPORATION
MADE IN JAPAN
"Under License of Staar S.A., Brussels, Belgium"
LINE IN REC
LINE OUT PLAY
REMOTE CONTROL

▼ European model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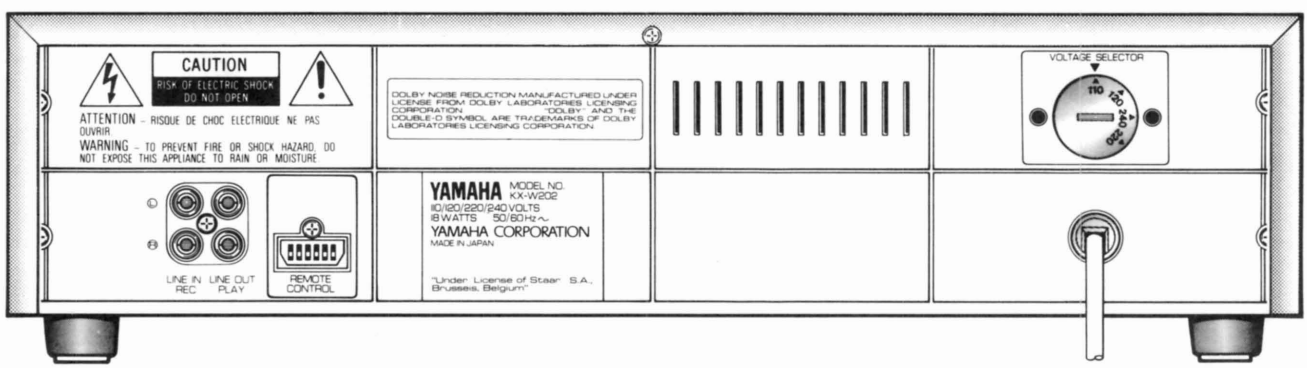
YAMAHA MODEL NO. KX-W202
220 VOLTS 18 WATTS
50Hz ~
YAMAHA CORPORATION
MADE IN JAPAN
"Under License of Staar S.A., Brussels, Belgium"
LINE IN REC
LINE OUT PLAY
REMOTE CONTROL

▼ General models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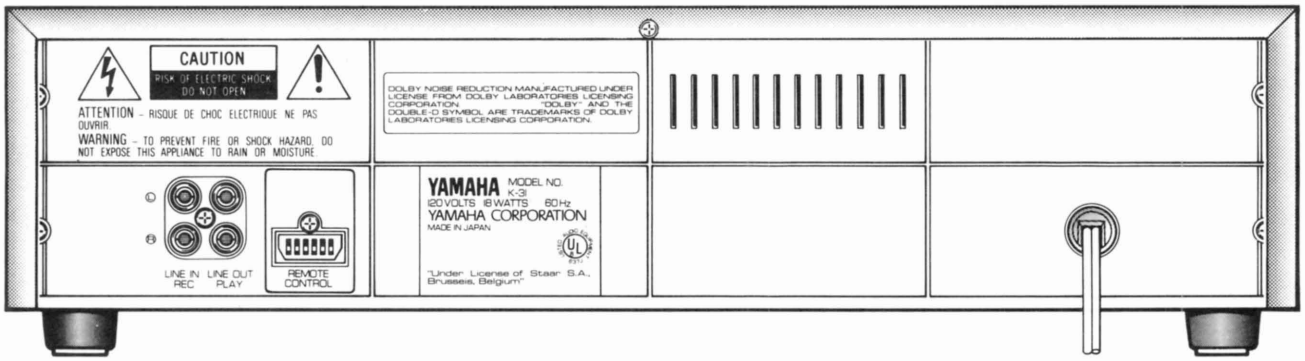
110/120/220/240 VOLTS
18 WATTS 50/60Hz ~
YAMAHA CORPORATION
MADE IN JAPAN
"Under License of Staar S.A., Brussels, Belgium"
LINE IN REC
LINE OUT PLAY
REMOTE CONTROL
VOLTAGE SELECTOR
110
120
220
240

K-31

▼ U.S.A. & Canadian models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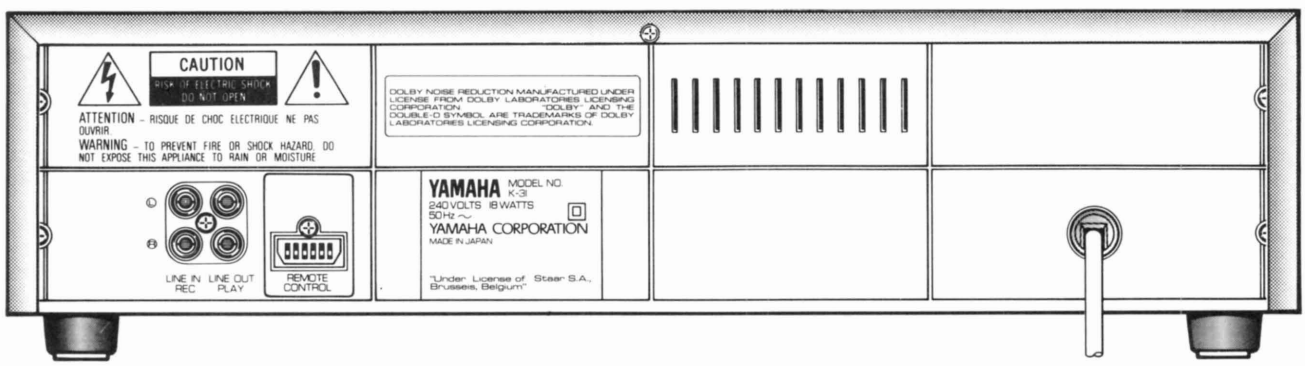
YAMAHA MODEL NO. K-31
120 VOLTS 18 WATTS 60 Hz
YAMAHA CORPORATION
MADE IN JAPAN
"Under License of Staar S.A., Brussels, Belgium"
LINE IN REC
LINE OUT PLAY
REMOTE CONTROL

▼ Australian & British models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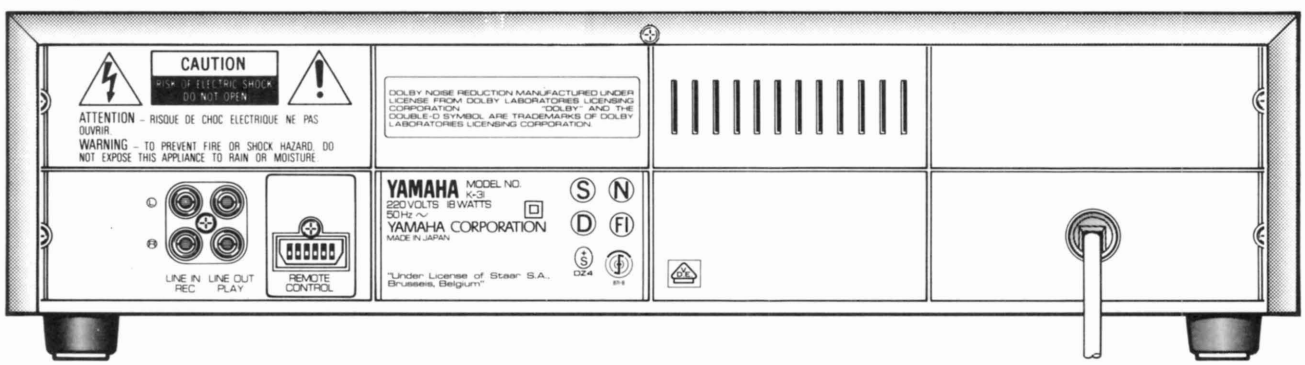
YAMAHA MODEL NO. K-31
240 VOLTS 18 WATTS
50 Hz ~
YAMAHA CORPORATION
MADE IN JAPAN
"Under License of Staar S.A., Brussels, Belgium"
LINE IN REC
LINE OUT PLAY
REMOTE CONTROL

▼ European model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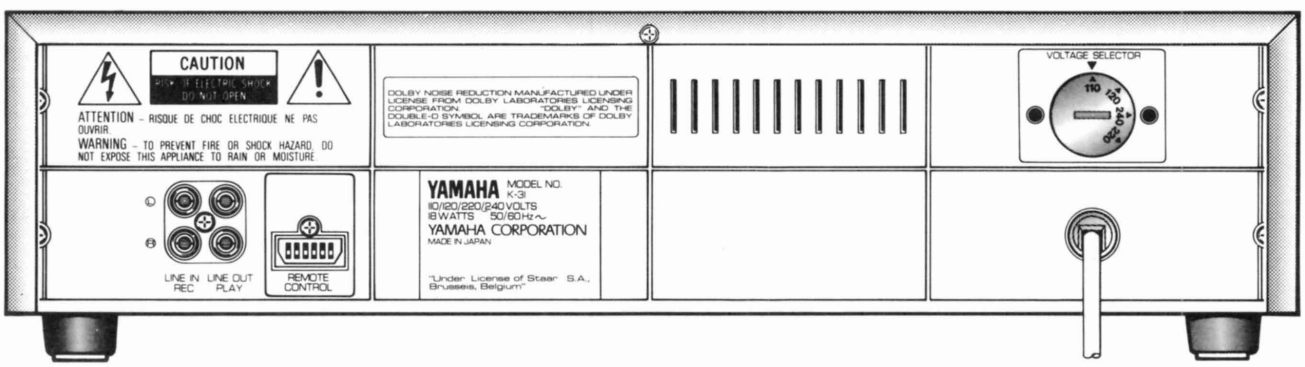
YAMAHA MODEL NO. K-31
220 VOLTS 18 WATTS
50 Hz ~
YAMAHA CORPORATION
MADE IN JAPAN
"Under License of Staar S.A., Brussels, Belgium"
LINE IN REC
LINE OUT PLAY
REMOTE CONTROL

▼ General models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VOLTAGE SELECTOR
110
120
220
240
YAMAHA MODEL NO. K-31
110/120/220/240 VOLTS
18 WATTS 50/60 Hz ~
YAMAHA CORPORATION
MADE IN JAPAN
"Under License of Staar S.A., Brussels, Belgium"
LINE IN REC
LINE OUT PLAY
REMOTE CONTROL

■ SPECIFICATIONS

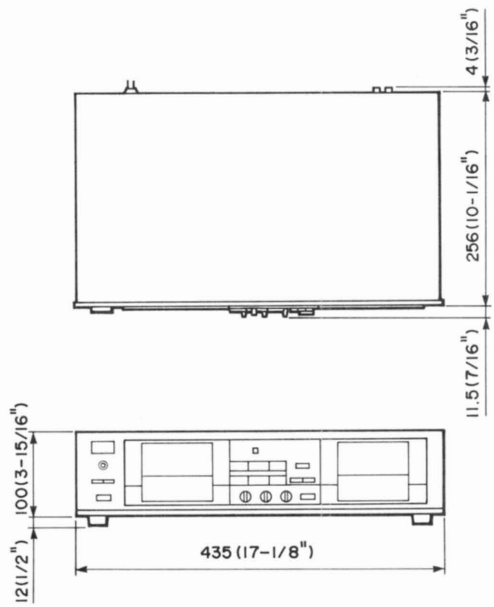
Track Configuration	4 track, 2 channel recording and playback stereo cassette tape deck
Motor	
Main	DC servo motor x 2
Heads	
Rec/play head	Hard Permalloy
Play head	Hard Permalloy
Erase head	Double Gap Ferrite
Wow and Flutter	
W. RMS	No more than 0.08%
W. Peak	No more than ± 0.15%
Fast Winding Time	Approx. 100 seconds (C-60)
Signal-to-Noise Ratio	
Dolby off	More than 58dB
Dolby B on	More than 66dB
Dolby C on	More than 74dB
Frequency Response (–20dB)	
Normal Tape	20 – 16000Hz, ± 3dB
CrO_2 Tape	20 – 17000Hz, ± 3dB
Metal Tape	20 – 18000Hz, ± 3dB
Harmonic Distortion	No more than 1.0%
Channel Separation	More than 40dB
Crosstalk	More than 55dB
Input Sensitivity	
Line	50mV/50k-ohms
Output Reference Level/Load Impedance	
Line	360mV/1.2k-ohms
Phones	0.3mW/8ohms
Power Supplies	
U.S. & Canadian Models	120V AC, 60Hz
European Model	220V AC, 50Hz
British & Australian Models	240V AC, 50Hz
General Model	110/120/220/240V AC, 50/60Hz

Power Consumption	18W
Dimensions (W x H x D)	435 x 112 x 271.5mm (17-1/8" x 4-3/8" x 10-11/16")
Weight	4.5kg (19 lbs. 14 oz)

Specifications subject to change without notice.

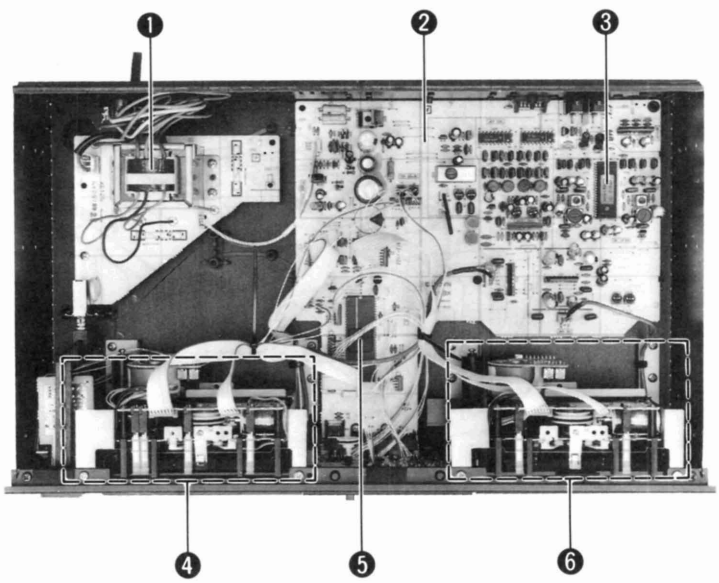
(U) ..... U.S.A. model
(C) ..... Canadian model
(A) ..... Australian model
(G) ..... European model
(B) ..... British model
(R) ..... General model

●Dimensions



Unit: mm (inch)

■ INTERNAL VIEW



❶ POWER TRANSFORMER ASS'Y
❷ MAIN CIRCUIT BOARD (1)
❸ DOLBY IC (IC4) : CX20187
❹ CASSETTE MECHANISM UNIT (DECK A)
❺ μ-COM IN (IC5) : LC6554H-3655
❻ CASSETTE MECHANISM UNIT (DECK B)

■ DISASSEMBLY PROCEDURES

1. Removal of Top Cover
Remove 5 screws (①) in Fig. 1.

2. Removal of Cassette Mechanism Unit (DECK A)
a. Remove theTop Cover.
b. Remove the Lid (②) in Fig. 1.
c. Remove the counter belt in Fig. 2.
d. Detach 6 connectors.
e. Remove 6 screws (③) in Fig. 1 and then pull off the Cassete Mechanism Unit to the back side gently.

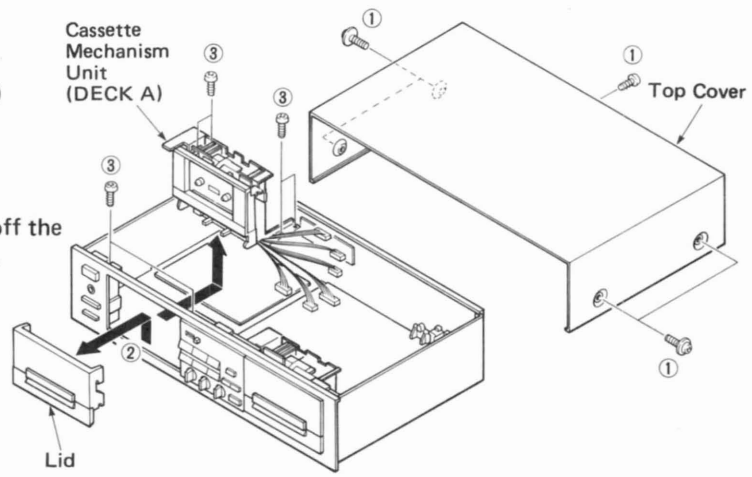


Fig. 1

- **Connector Wiring**

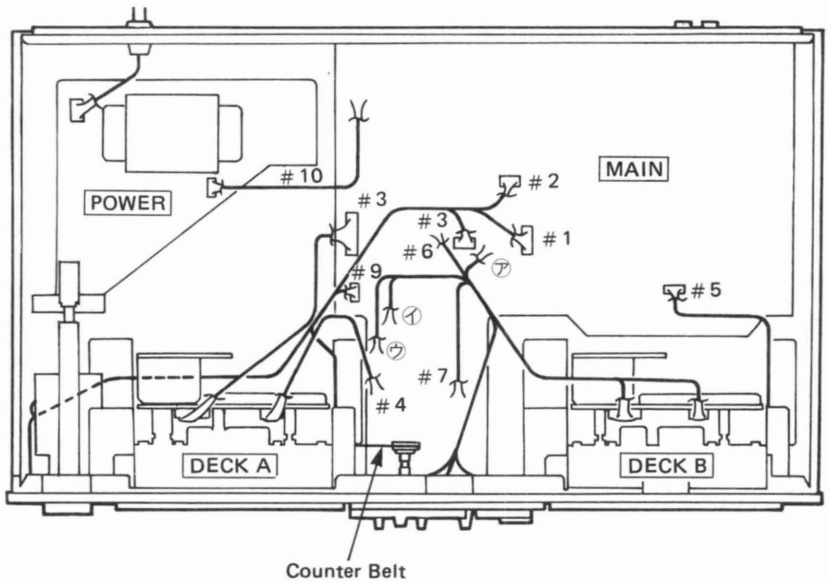


Fig. 2

3. Removal of Housing Ass'y
a. Detach the spring (④) in Fig. 3.
b. Remove the lower part of the housing ass'y by pressing it in the direction of the arrow.
c. Remove the housing ass'y from the damper arm.

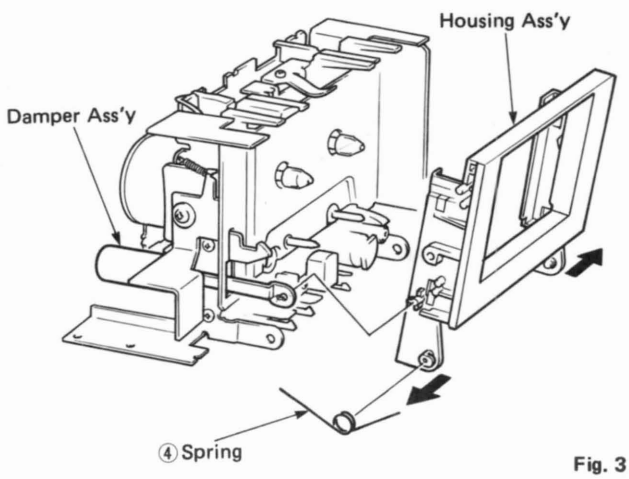


Fig. 3

4. Removal of Pinch Roller

Unhook at 1 place as shown in Fig. 4 and remove the Pinch Roller.

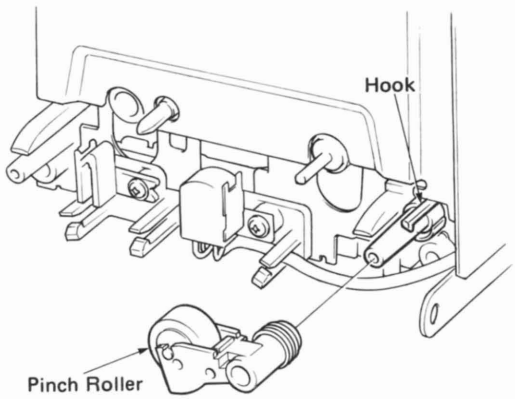


Fig. 4

5. Removal of Heads

a. Remove 2 screws (⑤) in Fig. 5 and then remove the Recording/Playback Head.

b. Remove 2 screws (⑥) in Fig. 5 and then remove the Erase Head.

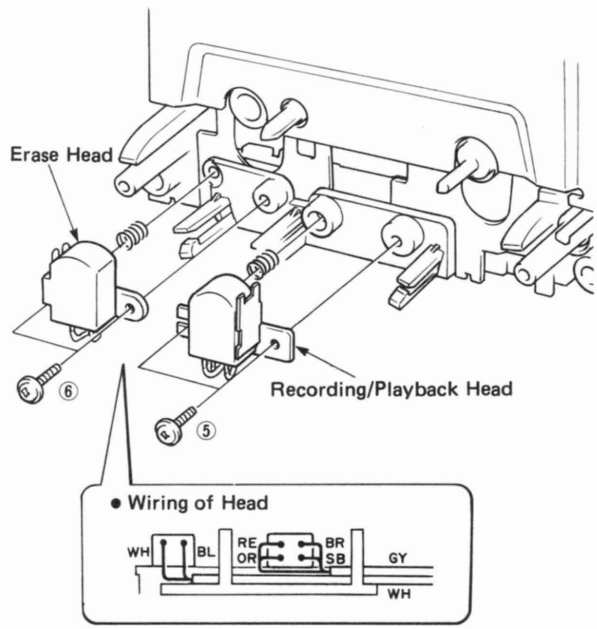


Fig. 5

6. Removal of Motor and Belt

a. Remove 2 screws (⑦) and then remove the blind plate.

*When reinstalling it, be sure to fit its lower ends to the positioning hooks as shown in the figure.

b. Remove 3 screws (⑧) and then remove the motor gradually.

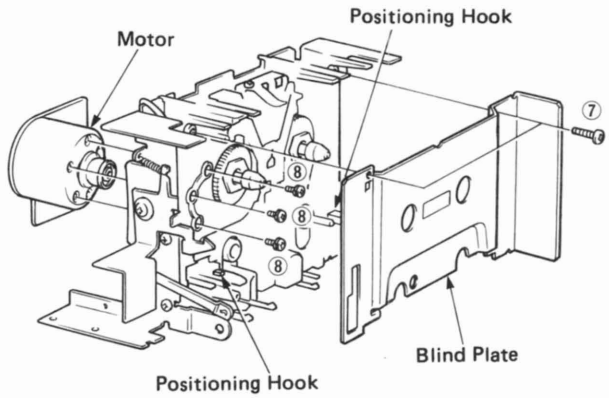
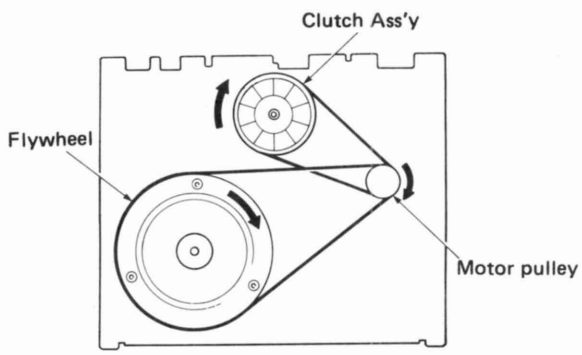


Fig. 6

• **Routing Belt (Viewed from the rear)**



■ ADJUSTMENTS

1. Before adjustment:

- Make sure the AC line voltage comes within

Models	AC line voltage
U, C	120V ± 10%
G	220V ± 10%
A, B	240V ± 10%

- Since head magnetization, dust accumulations, etc. are likely to introduce error in the various characteristics, it is very important that the heads are properly demagnetized and cleaned.

2 Instruments required

- Audio frequency oscillator (AF OSC)
- ACVM or dual channel (ACVM)
- Wow/flutter meter
- Oscilloscope
- Frequency counter
- Torque meter
  TW-2111 (TX911580) . . . Take up/back tension
  CT160L (TX911120) . . . FF/REW
  TW-2412 (TX911640) . . . Driving power
- DCVM
- Mirror Cassette
  MC-109C (TX911430) . . . Tape movement

3. Test tape required

- MTT-111N (TX911650) . . Normal speed
- TCW-211 (TX911550) . . . . High speed
- MTT-114N (TX911680) . . Azimuth
- MTT-212CN (TX911670) } Playback level
- MTT-212N (TX911660) }
- MTT-256 (TX911300) . . . . Playback frequency response (Normal)
- MTT-356 (TX911310) . . . . Playback frequency response (CrO_2)
- Reference tape
  Normal (LH): YAMAHA MU-R60 or TDK AC223 (TX911600)
  CrO_2 : TDK SA-60 or TDK AC513 (TX911270)
  METAL : YAMAHA ME-R60 or TDK AC712 (TX911590)

"MECHANICAL ADJUSTMENT"

Step	Item to be Adjusted	Tape	Instrument required	Mode	Adjustment part	Rating	Remarks
1	Check tape movement		Mirror Cassette (MC-109C)	PLAY		Tape should move in the center of head smoothly.	
2	Check driving power		Torque meter	PLAY		Driving power: more than 150g.	TW-2412
3	Check each torque		Torque meter	FF REW		FF, REW torque: more than 50g/cm	CT-160L
				PLAY		Take up torque: 40~80g/cm	TW2111
						Back tension: 1.0~6g/cm	
4	Check FF, REW take up time	AC-513 (C-60)		FF REW		Less than 105 ±15 seconds	
5	Azimuth	MTT-114N 10kHz, −10dB	ACVM Oscilloscope	PLAY	Azimuth adjustment screw. (Fig. A)	Playback output of L and R is maximum and phase difference should be minimum at the both derection.	After the adjustment make sure to apply screw lock paint.
6	Tape Speed	MTT-111N 3kHz, −10dB	Frequency counter	PLAY (NORM)	DECK A: VR 2 DECK B : VR 2	DECK A : 3000 $^{+15}_{-10}$ Hz DECK B : 3000 $^{+20}_{-5}$ Hz	Adjust normal speed mode first
		MTT-211 1.5kHz, −10dB		PLAY (HIGH)	DECK A : VR 1 DECK B : VR 1		*Short-circuit TP1 and TP2 in the tape playback mode.
7	Wow/Flutter	MTT-111N 3kHz, −10dB	Wow/flutter meter	PLAY		Less than 0.14% (WRMS)	Perform adjustment at the center of the test tape length if possible.

"ELECTRICAL ADJUSTMENT"

- Proceed with the following adjustment after having finished the mechanical adjustments.
- Proceed with the recording section adjustment after having finished the playback section adjustment.
- Use 360mV (160nwb/m) for 0dB as the standard level of the unit.

< Playback section >

Step	Item to be Adjusted	Tape	Instrument required	Mode	Measurement conditions	Points of measurement	Adjustment parts	Rating
1	Playback level	MTT-212CN 315Hz, 160nwb/m or MTT-212N 315Hz, 250nwb/m	ACVM	PLAY		LINE OUT	VR 3 (L ch) VR 4 (R ch)	160nwb/m: 360mV ± 25mV 250nwb/m: 560mV ± 35mV
2	Confirmation of playback frequency response	Test tape for frequency check. 3180μs + 120μs (LH) (MTT-256) 3180μs + 70μs (CrO_2) (MTT-356)	ACVM Oscilloscope	PLAY		LINE OUT		Check that the 10kHz playback level lies within 0 ± 3dB of the 315Hz playback level. (Table 1)

- **PLAYBACK FREQUENCY RESPONSE**

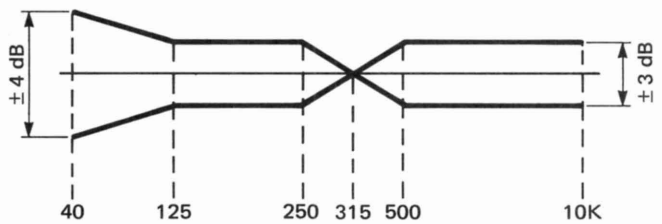


Table 1

< Recording section >

Step	Item to be Adjusted	Tape	Instrument required	Mode	Measurement conditions	Points of measurement	Adjustment parts	Rating
1	Meter		ACVM Audio frequency oscillator	REC/ PAUSE	Set the REC LEVEL knob maximum. Apply a 1kHz signal to LINE IN terminals. Set the output level of audio frequency oscillator so that LINE OUT voltage is 360mV.	Peak level meter	VR 9 (Lch) VR 10 (R ch)	Adjust VR 9 and VR 10 to the lowest level where the 0dB display part of the level meter light up.
2	Record level	AC-512 (CrO_2)	ACVM Audio frequency oscillator	REC PLAY	Apply a 1kHz signal to LINE IN terminals. Set the output level of audio frequency oscillator so that LINE OUT voltage is 360mV.	LINE OUT	VR 5 (Lch) VR 6 (Rch)	Set the same level of the record and playback level (360mV ± 25mV)
3	Record bias (Total frequency response)	AC-512 (CrO_2)	ACVM Audio frequency oscillator	REC PLAY	Apply a 14kHz signal to LINE IN terminals. Set the output level of audio frequency oscillator so that LINE OUT voltage is 36mV.	LINE OUT	VR 7 (Lch) VR 8 (Rch)	Set the same level of the record and playback level (36mV ± 10mV)
		AC223 (LH) AC712 (METAL)						Set the same level of the record and playback level. (Table 2) Perform record bias adjustment of CrO_2 tape again, if the rating was not satisfied.

- **TOTAL FREQUENCY RESPONSE (–20dB) . . DECK A ONLY**

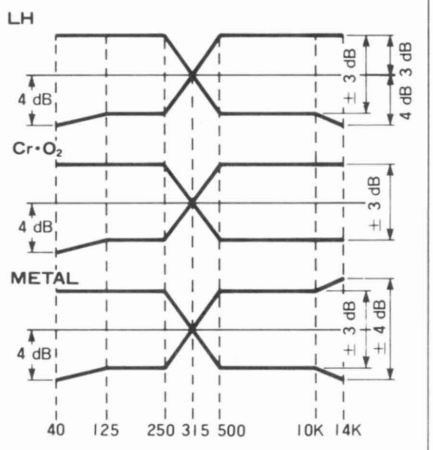
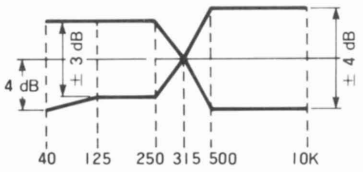
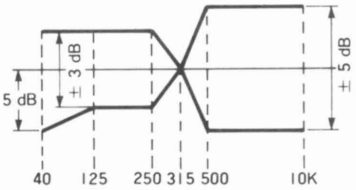
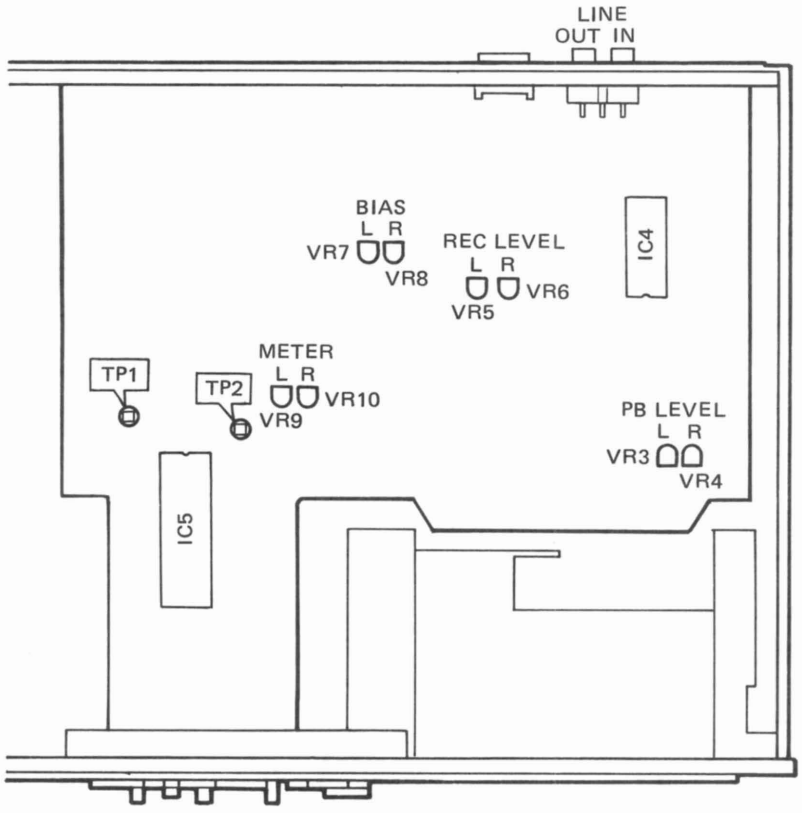
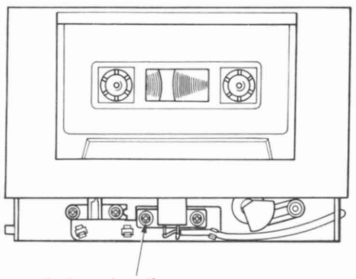
DOLBY NR OFF	DOLBY NR B	DOLBY NR C
		

Table 2

- **TEST POINTS**





Azimuth adjustment screw

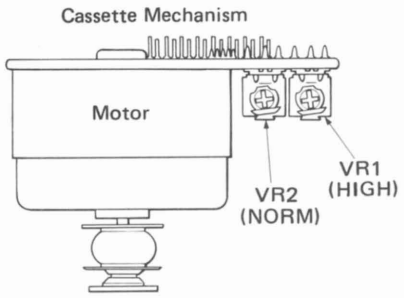
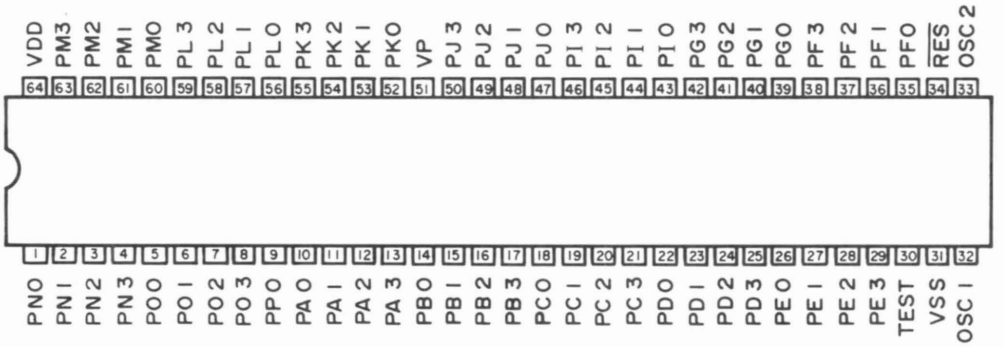
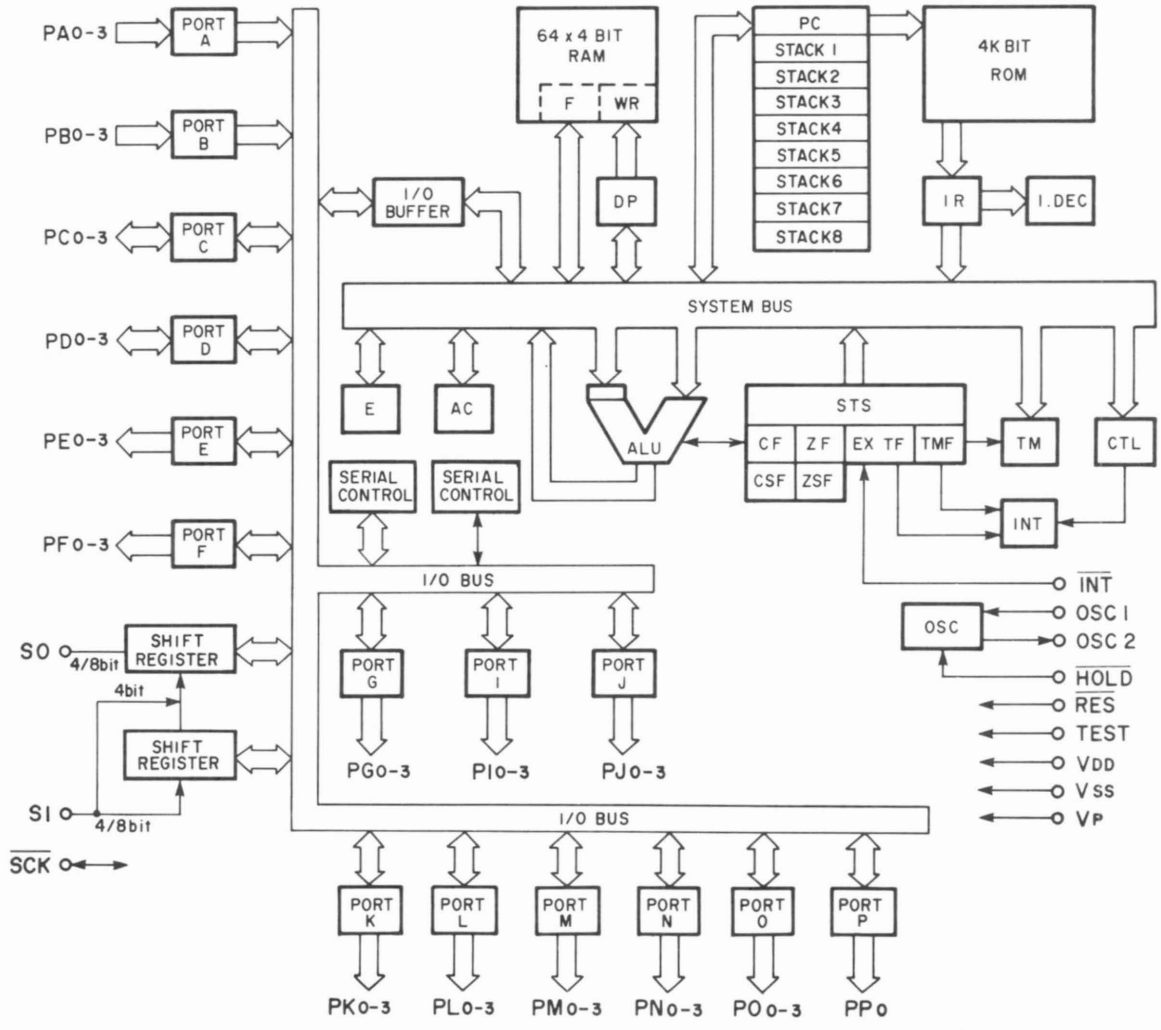


Fig. A

■ μ-COM DATA

IC5 : LC6554H -3655





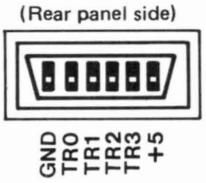
Pin No.	Name	Function	Level
1	N0	M1 : DECK B main motor output	
2	N1	M1	
3	N2	M2 } DECK A main motor output	
4	N3	M3	
5	O0	REC	
6	O1	DECK A	
7	O2	DECK B } LED output	H : ON
8	O3	DUBBING NORM	
9	P0	DUBBING HIGH	
10	A0	Pulse input, DECK A	
11	A1	Pulse input, DECK B	
12	A2	POWER OFF detect input	
13	A3	Pulse input, music selection	H:blank
14	B0	RS0	
15	B1	RS1 } Remote control input	
16	B2	RS2	
17	B3	RS3	
18	C0	REW	
19	C1	FF	
20	C2	PLAY	
21	C3	REC	
22	D0	STOP } Key input	L : ON
23	D1	MUTE/SEARCH	
24	D2	DUBBING NORM	
25	D3	DUBBING HIGH	
26	E0	DECK SELECTOR	
27	E1	TIMER PLAY } SW input	L : ON
28	E2	TIMER REC	
29	E3	MECH. REC SW input, DECK A	L:REC OK
30	TEST	} GND	
31	Vss		
32	OSC1	Clock (4 MHz)	

Pin No.	Name	Function	Level
64	VDD	+5V	
63	M3	M3 } DECK B main motor output	
62	M2	M2	
61	M1	LH	
60	M0	LH NORM	
59	L3	CrO_2 NORM } Amp Select	H : Select
58	L2	CrO_2	
57	L1	METAL NORM	
56	L0	METAL	
55	K3	BIAS ON/OFF control output	L : ON
54	K2	REC/PB select output, (DECK A)	H:REC
53	K1	A/B Playback select output	H : A
52	K0	REC/PB select output, (DOLBY IC)	H:REC
51	VP	GND	
50	J3	LINE } Mute output	L : ON
49	J2	REC	
48	J1	METAL } BIAS select output	L : Select
47	J0	CrO_2	
46	I 3	Holding output } DECK B solenoid	L:Hold
45	I 2	Sucking output	L : ON
44	I 1	Holding output } DECK A solenoid	L:Hold
43	I 0	Sucking output	L : ON
42	G3	STOP 2	
41	G2	PLAY } DECK B MECH. SW input	L : ON
40	G1	PACK	
39	G0	METAL	
38	F3	70μ	
37	F2	STOP 2 } DECK A MECH. SW input	L : ON
36	F1	PLAY	
35	F0	PACK	
34	RES	Reset input	
33	OSC2	Clock (4 MHz)	

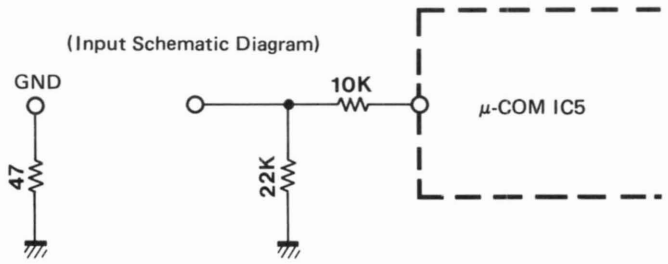
- **Remove Control Terminal**

Pin Name

(Rear panel side)



(Input Schematic Diagram)



TR 3	TR 2	TR 1	TR 0	MODE
L	L	L	L	NO DATA
L	L	L	H	STOP
L	L	H	L	FF
L	L	H	H	REW
L	H	L	L	PLAY
L	H	L	H	REC/PAUSE
L	H	H	L	REC MUTE
H	L	L	L	CUE
H	L	L	H	REVIEW
H	H	H	L	DUBBING
H	H	H	H	SELECTOR

No other code input than this table and simultaneous operation of MUTE and FF. REW keys is not acceptable.

Note) H ..... 3 to 5V
L ..... Less than 0.6V
Output load impedance is less than 10kΩ.
Pulse ... More than 30msec.

- **Mode VS Output**

Note) When the mode is DECK A, select a 2, 3, 4 or 44 pin output and a 1, 62, 63 or pin output for the DECK B mode.

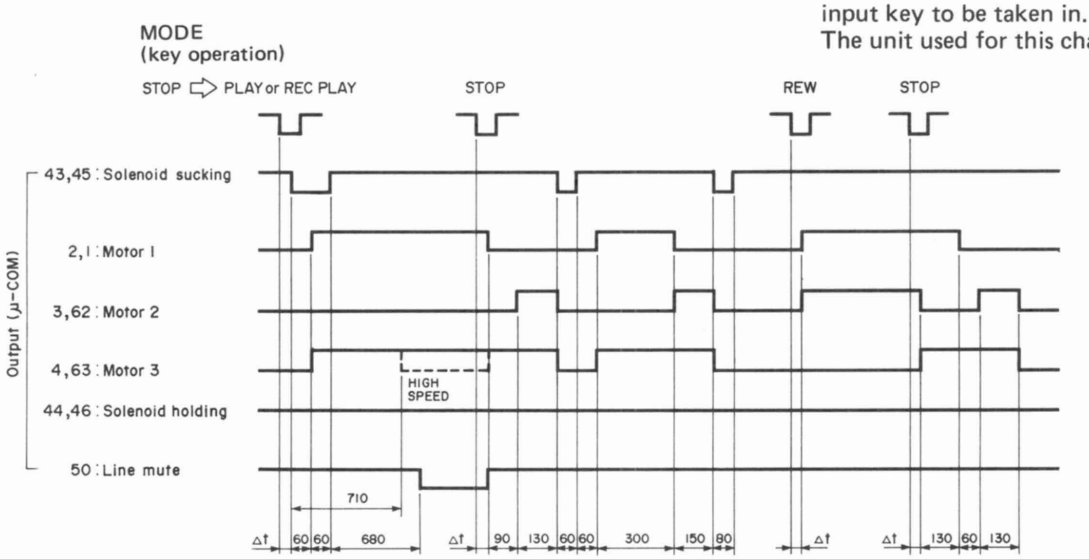
mode / Pin output	STOP	FWD PLAY	REC/ PAUSE	REC PLAY	▷▷	◁◁	▷▷ SEARCH	◁◁ SEARCH	DUBBING
2, 1 : Motor 1	L	H	L	H	H	H	H	H	H
3, 62 : Motor 2	L	L	L	L	H	H	H	H	L
4, 63 : Motor 3	L	H	L	H	H	L	H	L	H
44, 46 : Solenoid hold	H	H	H	H	H	H	L	L	H
54 : REC/PB	L	L	H	H	L	L	L	L	H
52 : Dolby REC/PB	L	L	H	H	L	L	L	L	L
50 : Line mute	L	H	H	H	L	L	L	L	H
49 : REC mute	L	L	L	H	L	L	L	L	H
55 : REC bias	H	H	H	L	H	H	H	H	L

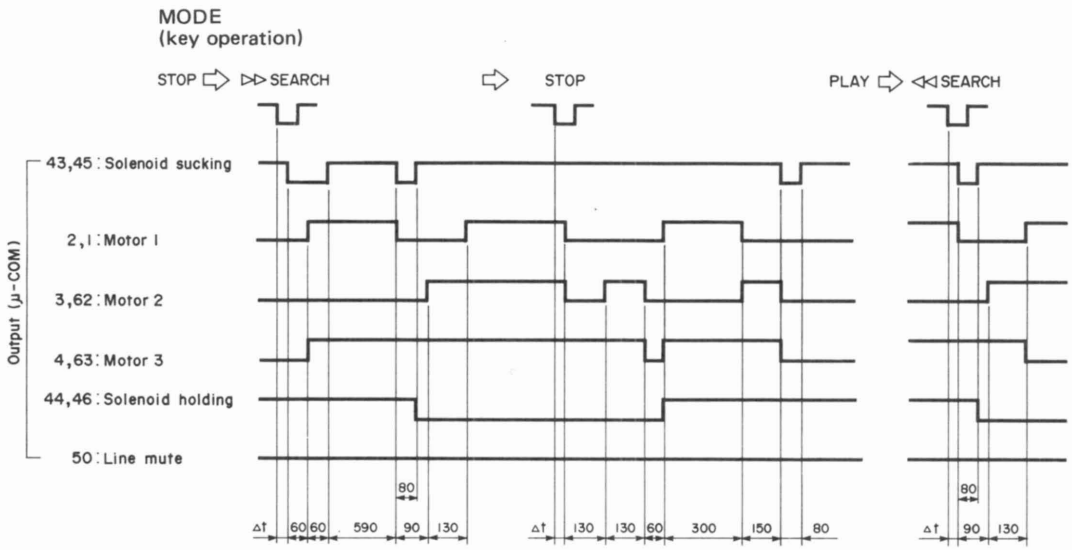
Mode / Pin output / Tape speed	LH		CrO_2		METAL	
	Normal	High	Normal	High	Normal	High
61 : LH Amp select	H	H	L	L	L	L
60 : LH Normal speed Amp select	H	L	L	L	L	L
59 : CrO_2	L	L	H	H	L	L
58 : CrO_2 Normal speed Amp select	L	L	H	L	L	L
57 : METAL	L	L	L	L	H	H
56 : METAL Normal speed Amp select	L	L	L	L	H	L
48 : METAL tape bias select	H	H	H	H	L	L
47 : CrO_2 tape bias select	H	H	L	L	H	H

■TIMING CHART

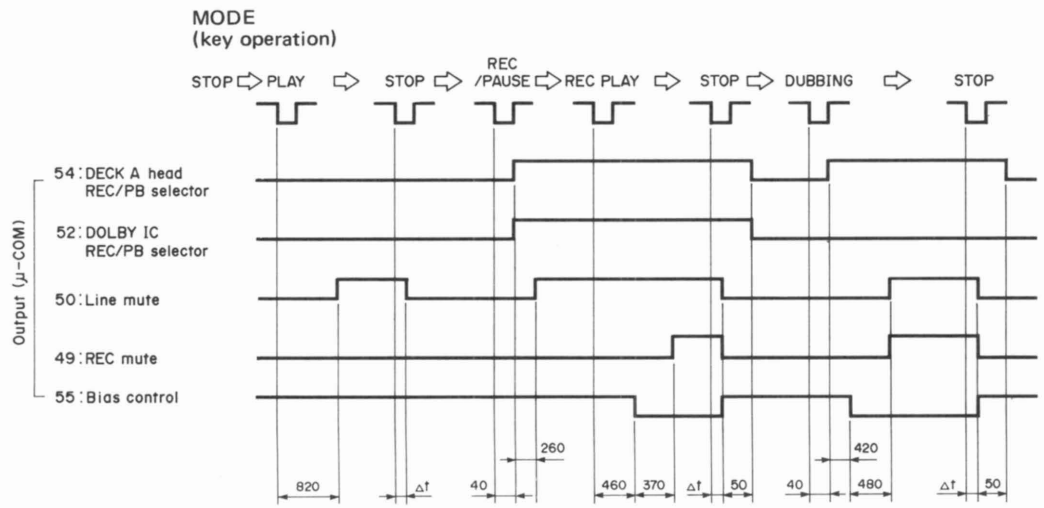
• MECHANISM DRIVE TIMING

Note) It takes about 20mS (△t) for an input key to be taken in.
The unit used for this chart is mS.



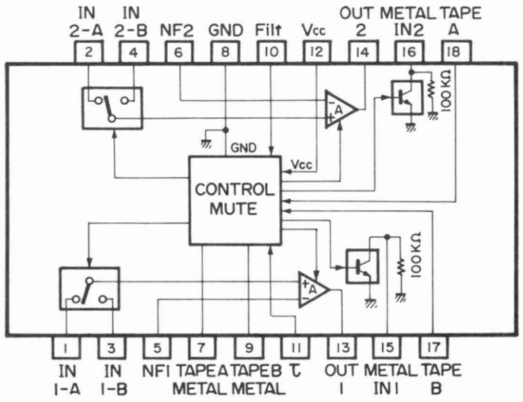


• AMP SELECTOR TIMING

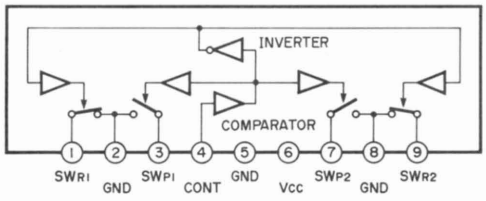

MODE
(key operation)
STOP ⇨ PLAY ⇨ STOP ⇨ REC /PAUSE ⇨ REC PLAY ⇨ STOP ⇨ DUBBING ⇨ STOP
Output (μ-COM)
54 : DECK A head REC/PB selector
52 : DOLBY IC REC/PB selector
50 : Line mute
49 : REC mute
55 : Bias control
260
420
820 △t 40 460 370 △t 50 40 480 △t 50

■IC BLOCK

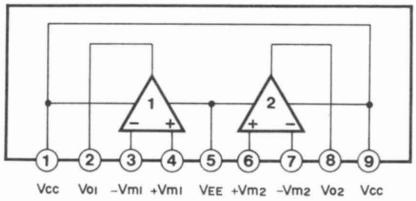
IC1 : BA3416BL
Low Noise Pre-amp with switch



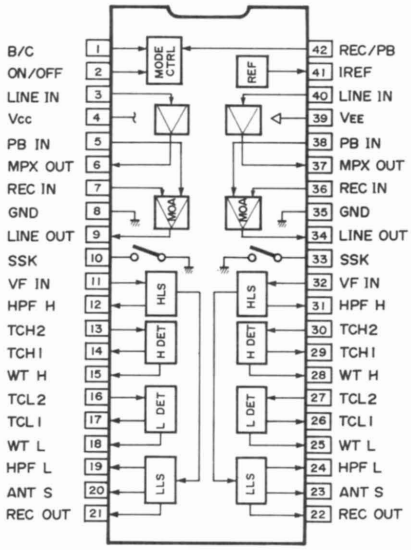
IC2 : μPC1330HA
2 ch Head Selector Switch



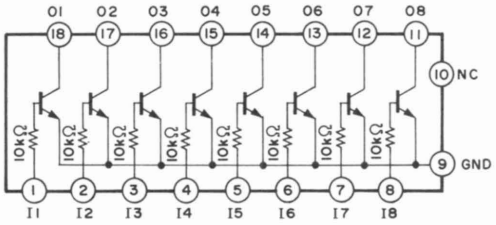
IC6, 10 : AN6551, NJM4558S or BA715
IC9 : NJM4556S
Dual Ope-amp



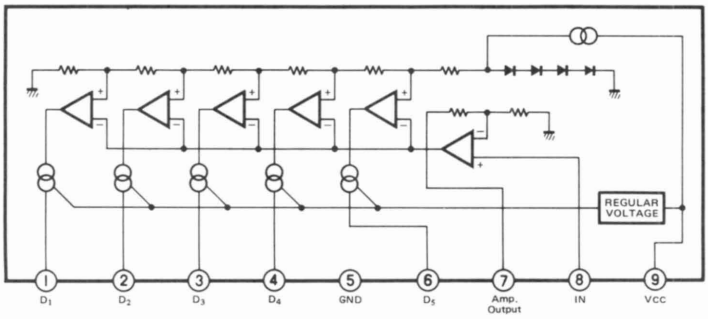
IC4 : CX20187
Dolby B-& C-Type Noise Reduction Processor



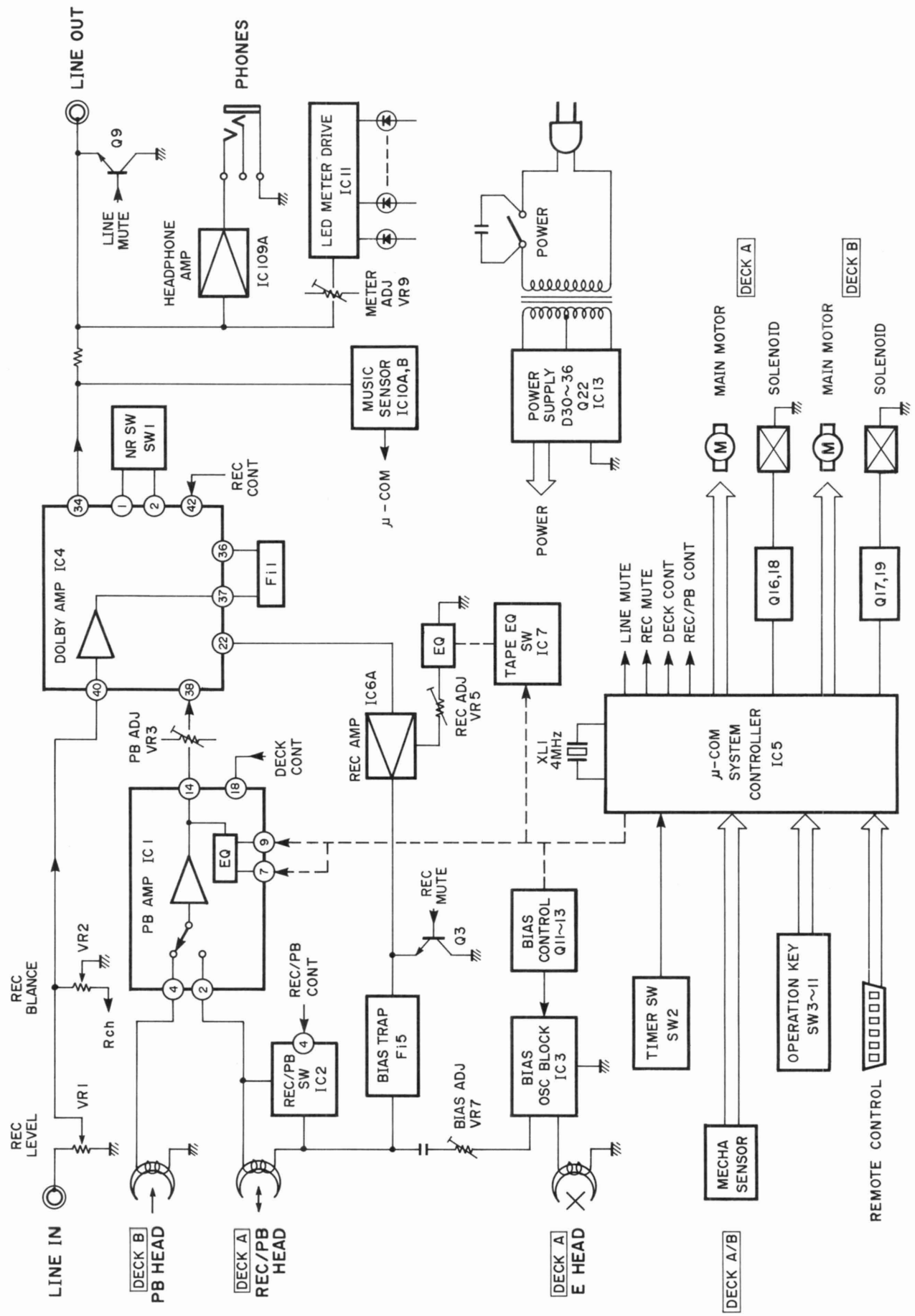
IC7, 8: AN90B20
Transistor Array



IC11, 12 : BA6124 or LB1403N
LED Level Meter Driver



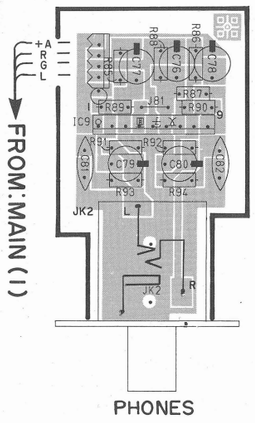
■ BLOCK DIAGRAM



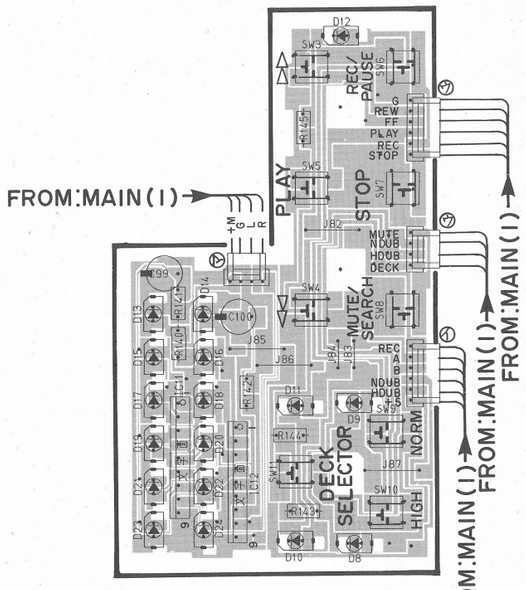
■ PRINTED CIRCUIT BOARD (Pattern side)

Note) 文字面 : Component side

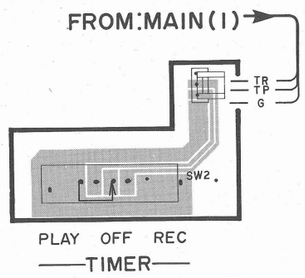
Main Circuit Board (3)



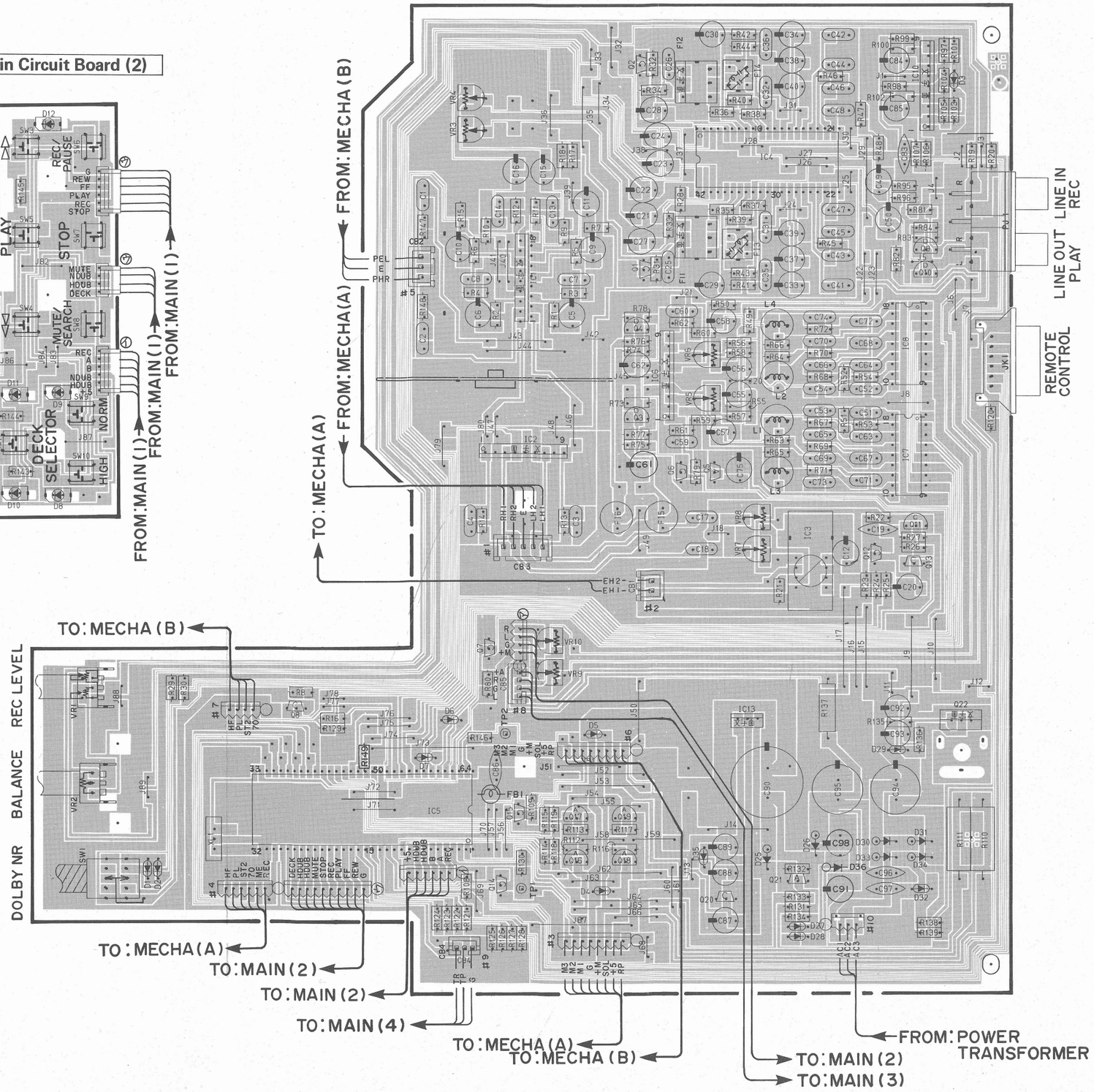
Main Circuit Board (2)



Main Circuit Board (4)



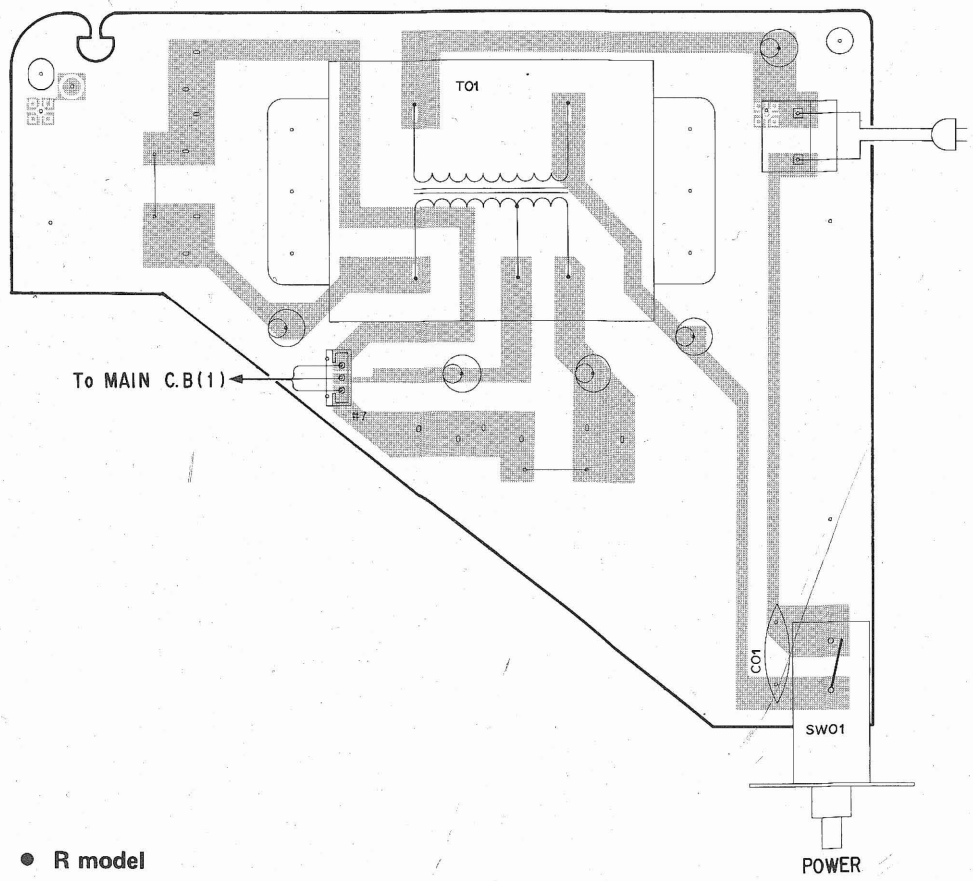
Main Circuit Board (1)



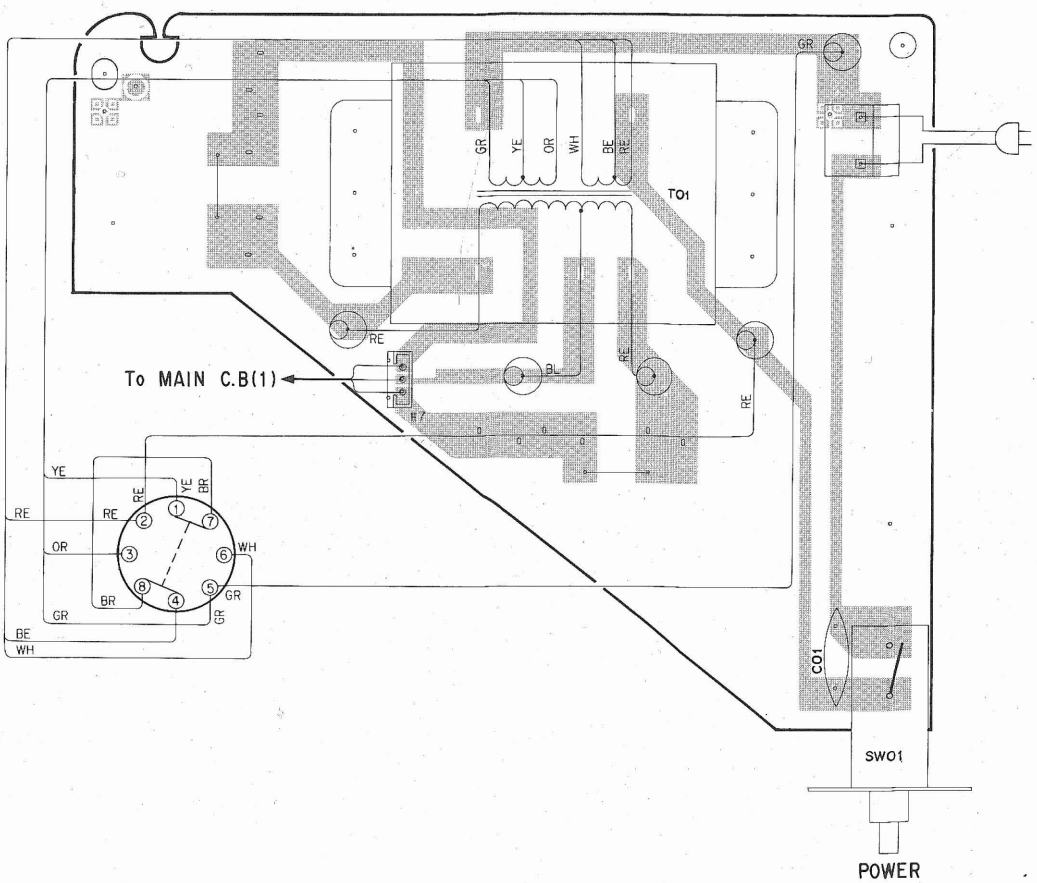
■ PRINTED CIRCUIT BOARD(Pattern side)

Power Circuit Board

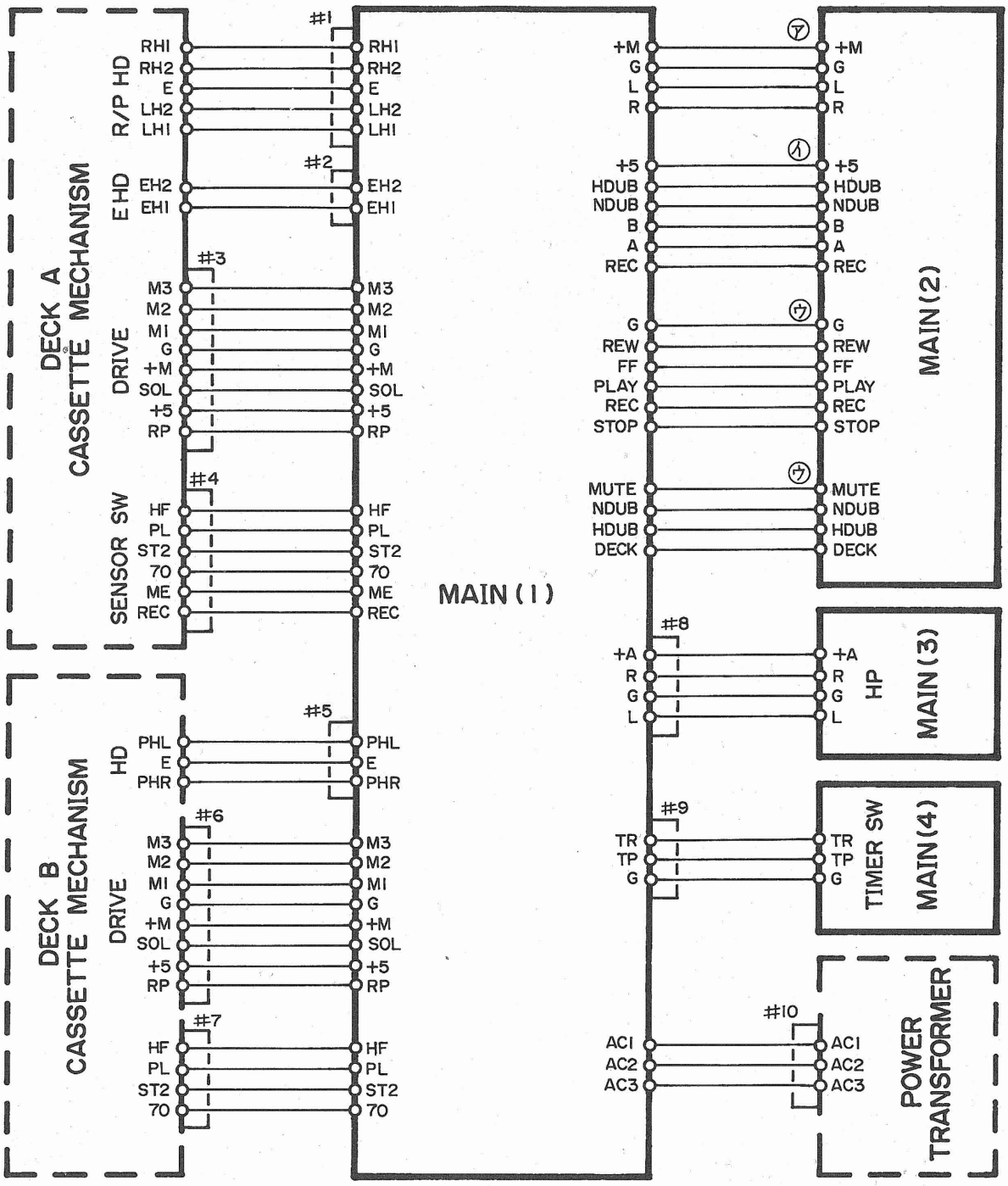
- U. C, A. B, G models



- R model



WIRING


DECK A
CASSETTE MECHANISM
R/P HD
RH1
RH2
E
LH2
LH1
#1
EHD
EH2
EH1
#2
DRIVE
M3
M2
M1
G
+M
SOL
+5
RP
#3
SENSOR SW
HF
PL
ST2
70
ME
REC
#4
DECK B
CASSETTE MECHANISM
HD
PHL
E
PHR
#5
DRIVE
M3
M2
M1
G
+M
SOL
+5
RP
#6
HF
PL
ST2
70
#7
MAIN (1)
+M
G
L
R
⑦
+5
HDUB
NDUB
B
A
REC
①
G
REW
FF
PLAY
REC
STOP
⑰
MUTE
NDUB
HDUB
DECK
⑰
MAIN (2)
+A
R
G
L
#8
HP
MAIN (3)
TR
TP
G
#9
TIMER SW
MAIN (4)
AC1
AC2
AC3
#10
POWER
TRANSFORMER

■ SCHEMATIC DIAGRAM

RESISTOR

REMARKS	PARTS NAME
NO MARK	CARBON FILM RESISTOR
☑	CARBON FILM RESISTOR (1/6W)
△	METAL OXIDE FILM RESISTOR
▲	METEL FILM RESISTOR
⊠	METEL PLATE RESISTOR
▨	FIRE PROOF CARBON FILM RESISTOR
□	SEMENT MOLDED RESISTOR
⊘	SEMI VARIABLE RESISTOR

CAPACITOR

REMARKS	PARTS NAME
NO MARK	ELECTROLYTIC CAPACITOR
NO MARK	CERAMIC CAPACITOR
◎	POLYESTEL FILM CAPACITOR
○	POLYSTYRENE FILM CAPACITOR
Ⓘ	MICA CAPACITOR
Ⓟ	POLYPROPYLENE FILM CAPACITOR
◉	SEMICONDUCTIVE CERAMIC CAPACITOR

D10-11-13-18	SLR-34MC3H3
D8-9-12-19-24	SLR-34URC3H3
D1-2-27-28-32-36	1SS133

NOTICE
{U} ····· U.S.A model
{C} ····· Canadian model
{A} ····· Australian model
{G} ····· European model
{B} ····· British model
{R} ····· General model

PIN CONNECTION DIAGRAM OF TRANSISTORS, DIODES AND ICS.

2SA933S (Q, R) 2SA1115 (E, F) 2SA1310 (R, S, T) 2SC1740S (S, R) 2SC2603 (E, F) 2SC3312 (R, S, T) DTA114ES DTC114ES	2SD655 (E, F) 2SD1302 (R, S) 2SD1468 (Q, R, S)	2SA934 2SB544 2SC2060 2SD400	2SC1983	1SS133 1SR35-100AT-93X MTZ16A	SLR-34URC3H3 SLR-34MC3H3	AN78M05 LA78N05	AN6551 NJM4558S BA715	BA6124 LB1403N	NJM4556S	BA3416BL	µPC1330HA	AN90B20	CX20187	LC6554H-3655

- *All voltages are measured with a 10MΩ/V DC electric volt meter.*
- *Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.*
- *Schematic diagram is subject to change without notice.*

PARTS LIST

■WARNING

Components having special characteristics are marked ⚠ and must be replaced with parts having specifications equal to those originally installed.

- Carbon resistors (1/6W or 1/4W) are not included in the ELECTRICAL PARTS list. For the parts No. of the carbon resistor, refer to p. 31.

■ELECTRICAL PARTS

	Ref. No.	Part No.	Description		部品名	Remarks	Common Model	Markets	ランク
※		***NA 09 73 10***	***Main Circuit Board***		メインシート				
		FG 24 41 00	Ceramic Cap.	0.01μF 50V	セラコン	C19,83,86			
		FG 24 44 70	〃	0.047μF 50V	〃	C81,82,96,97			
		FA 15 32 00	Mylar Cap.	2000pF 50V	マイラーコン	C63,64,73,74			
		FA 15 32 20	〃	2200pF 50V	〃	C69,70			
		FA 15 33 00	〃	3000pF 50V	〃	C71,72			
		FA 15 33 30	〃	3300pF 50V	〃	C25,26			
		FA 15 34 30	〃	4300pF 50V	〃	C67,68			
		FA 15 34 70	〃	4700pF 50V	〃	C31,32			
		FA 15 35 10	〃	5100pF 50V	〃	C65,66			
		FA 15 36 80	〃	6800pF 50V	〃	C45,46			
		FA 15 37 50	〃	7500pF 50V	〃	C51,52			
		FA 15 41 00	〃	0.01μF 50V	〃	C47,48			
		FA 15 41 20	〃	0.012μF 50V	〃	C53,54			
		FA 15 41 50	〃	0.015μF 50V	〃	C35,36			
		FA 15 42 20	〃	0.022μF 50V	〃	C13,14			
		FA 15 43 00	〃	0.03μF 50V	〃	C7,8			
		FA 15 44 70	〃	0.047μF 50V	〃	C43,44			
		FA 15 46 80	〃	0.068μF 50V	〃	C41,42			
		FA 15 51 00	〃	0.1μF 50V	〃	C59,60			
		UJ 11 81 00	Electrolytic Cap.	100μF 6.3V	ケミコン	C89			
		UJ 14 64 70	〃	4.7μF 25V	〃	C27,28,61,62,77,78			
		UJ 14 71 00	〃	10μF 25V	〃	C15,16,49,50,57,58,76,92			
		UJ 14 72 20	〃	22μF 25V	〃	C9,10,20,88			
		UJ 14 73 30	〃	33μF 25V	〃	C55,56,79,80,93			
		UJ 14 74 70	〃	47μF 25V	〃	C12,91			
		UJ 14 82 20	〃	220μF 25V	〃	C5,6,11,29,30,98			
		UJ 16 54 70	〃	0.47μF 50V	〃	C33,34			
		UJ 16 61 00	〃	1μF 50V	〃	C23,24,75,84,85			
		UJ 16 62 20	〃	2.2μF 50V	〃	C21,22			
		UJ 13 91 00	〃	1000μF 16V	〃	C95			
		Ui 93 98 20	〃	8200μF 16V	〃	C90			
		UJ 15 91 00	〃	1000μF 35V	〃	C94			
※		UM 40 71 00	〃	10μF 25V	〃	C99,100			
		UW 36 51 50	〃	0.15μF 50V	〃	C37,38,87			
		UJ 16 52 20	〃	0.22μF 50V	〃	C39,40			
		UT 45 21 00	Polypropylene Film Cap.	100pF 100V	ポリプロコン	C17,18			
		UT 45 26 80	〃	680pF 100V	〃	C1～4			
		GE 20 05 10	Dolby Filter		ドルビーフィルター	Fi1,2 } Inter-changeable			
		VB 75 89 00	MPX Coil		MPXコイル	〃 }			
		GE 90 04 80	Bias Trap Coil	105kHz	バイアストラップコイル	Fi5,6 } Inter-changeable			
		GE 90 07 80	〃	105kHz	〃	〃 }			
		VB 75 88 00	Skewing Coil		スキューイングコイル	Fi3,4			
		VE 79 74 00	Bead Filter	ZBF-503S-01	ビーズフィルター	FB1			
		GE 90 16 40	Coil	12mH	コイル	L1～4			
		VB 75 91 00	Ceramic Resonator	4MHz	セラミック振動子	XL1			
		HL 31 43 30	Metal Oxide Film Resistor	33Ω 1W	酸金抵抗	R137			
		HL 32 42 70	〃	27Ω 2W	〃	R110,111			

※New Parts (新規部品) NR

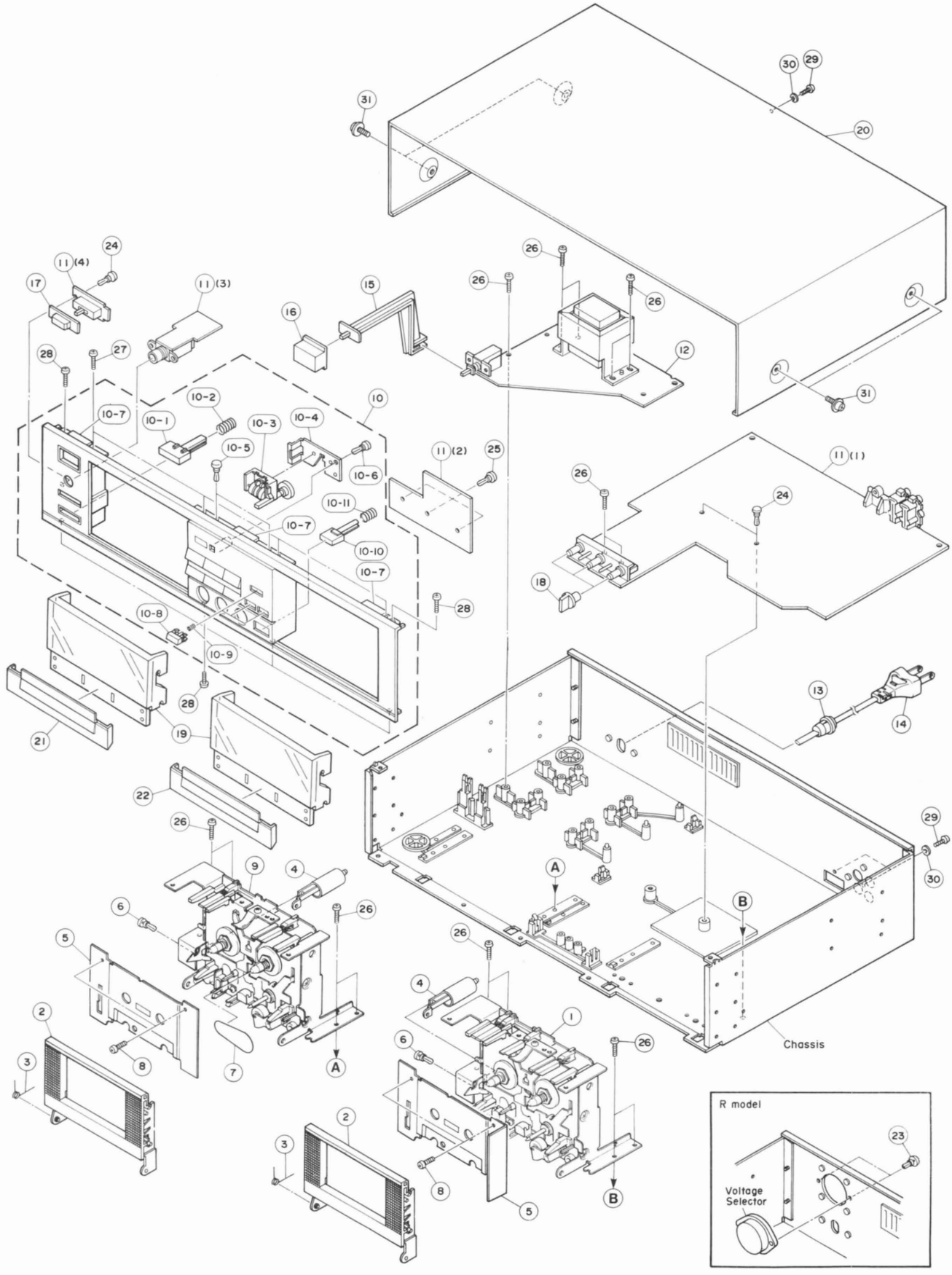
	Ref. No.	Part No.	Description		部品名	Remarks	Common Model	Markets	ランク
		VB 86 14 00	Pre-Set Potentiometer	B4.7kΩ	半固定抵抗	VR5,6			
		VB 86 15 00	〃	B10kΩ	〃	VR9,10			
		VB 86 16 00	〃	B22kΩ	〃	VR3,4			
		VC 61 26 00	〃	B150kΩ	〃	VR7,8			
※		VE 80 60 00	Rotary Potentiometer	50KA×2	ロータリーVR	VR1			
※		VE 80 59 00	〃	W100K	〃	VR2			
		iA 09 34 00	Transistor	2SA934	トランジスター	Q16～19 } Inter-changeable			
		iB 05 44 10	〃	2SB544	〃	〃 } Inter-changeable			
		iA 11 15 10	〃	2SA1115(E,F)	〃	Q21 } Inter-changeable			
		iA 09 33 70	〃	2SA933S(Q,R)	〃	〃 } Inter-changeable			
		iX 60 31 70	〃	2SA1310(R,S,T)	〃	〃 } Inter-changeable			
		iC 20 60 00	〃	2SC2060	〃	Q11 } Inter-changeable			
		iD 04 00 10	〃	2SD400	〃	〃 } Inter-changeable			
		iC 19 83 00	〃	2SC1983	〃	Q22			
		iC 26 03 10	〃	2SC2603(E,F)	〃	Q6,12 } Inter-changeable			
		iC 17 40 70	〃	2SC1740S(S,R)	〃	〃 } Inter-changeable			
		iX 60 31 80	〃	2SC3312(R,S,T)	〃	〃 } Inter-changeable			
		iD 06 55 10	〃	2SD655(E,F)	〃	Q3,4,9,10 } Inter-changeable			
		iD 13 02 00	〃	2SD1302(R,S)		〃 } Inter-changeable			
		VD 67 85 00	Digital Transistor	DTA114ES	デジタルトランジスター	Q5			
		VD 67 87 00	〃	DTC114ES	〃	Q1,2,7,8,13,20			
※		VF 33 12 00	〃	DTC124ES	〃	Q14,15			
		iF 00 34 50	Diode	1SS133	ダイオード	D1～7,27,28,32,35,36			
		iH 00 14 30	〃	1SR35-100A	〃	D25,26,30,31,33,34			
		iF 00 89 30	Zener Diode	MTZ16A	ツェナーダイオード	D29			
		iF 00 87 30	LED (Red)	SLR-34URC3H3	LED	D8,9,12,19～24			
		iF 00 87 40	LED (Green)	SLR-34MC3H3	〃	D10,11,13～18			
		iG 03 47 00	IC	AN6551	IC	IC6,10 } Inter-changeable			
		iG 07 68 00	〃	NJM4558S	〃	〃 } Inter-changeable			
		iG 13 22 00	〃	BA715	〃	〃 } Inter-changeable			
		iG 07 74 00	〃	NJM4556S	〃	IC9			
		iG 12 59 00	〃	BA6124	〃	IC11,12			
※		XD 86 40 01	〃	μPC1330HA	〃	IC2			
		XB 29 80 01	〃	CX20187	〃	IC4			
		XB 68 70 01	〃	BA3416BL	〃	IC1			
※		XE 14 80 02	〃	LC6554H-3655	〃	IC5			
		XA 50 60 01	〃	L78N05	〃	IC13			
		iG 08 99 00	Transistor Array	AN90B20	トランジスターアレイ	IC7,8			
		VC 61 67 00	Bias Oscillator Block		バイアス発振ブロック	IC3			
		KA 90 63 80	Switch	5M EVQ-QRB-04M	ライトタッチスイッチ	SW3～11			
		VC 57 25 00	Rotary Switch		ロータリースイッチ	SW1			
		VB 11 42 00	Slide Switch		スライドスイッチ	SW2			
		VB 09 73 00	Headphone Jack		ヘッドホーンジャック	JK2			
		LB 60 83 90	ST Connector	6P	ST コネクター	JK1			
		LB 40 10 50	Pin Jack	4P	ピンジャック	PJ1			
		LB 91 80 20	Base Pin	2P i-Type	XH ベースピン	CB1			

※New Parts（新規部品）NR

	Ref. No.	Part No.	Description		部品名	Remarks	Common Model	Markets	ランク	
		LB 91 80 30	Base Pin	3P i-Type	X H ベースピン	CB2				
		LB 91 80 50	〃	5P i-Type	〃	CB3				
		VD 00 46 00	〃	3P i-Type	P H ベースピン	CB4				
		VD 00 47 00	〃	4P i-Type	〃	CB5				
		LA 00 41 20	Test Point Pin		テストポイントピン					
		CB 65 71 90	PCB Bracket		PCBブラッケット					
		AA 61 69 90	Shield Plate		シールド板					
※		***NA 09 72 40***	***Power Transformer A'ssy***		電源トランスA'ssy		KX-300	U,C		
※		***NA 09 72 50***	〃		〃		〃	R		
※		***NA 09 72 60***	〃		〃		〃	A,B		
※		***NA 09 72 70***	〃		〃		〃	G		
		Fi 41 41 00	Ceramic Cap	0.01μF VA-1	セラコン	Inter-changeable				⚠
		Fi 51 41 00	〃	0.01μF DNS	〃					⚠
		VA 89 08 00	〃	0.01μF 400V	〃					⚠
		KA 80 51 50	Power Switch	ESB8215V-F	パワースイッチ					⚠
		GA 68 72 10	Power Transformer		電源トランス			R		⚠
		GA 68 71 00	〃		〃			U,C		⚠
		GA 68 74 00	〃		〃			A,B		⚠
		GA 68 73 00	〃		〃			G		⚠
		VE 22 57 00	Post	2P	ベース付ポスト					
		LB 92 50 30	Short Plug	3P i-Type	ショートプラグ					

※New Parts（新規部品）NR

EXPLODED VIEW



■MECHANISM PARTS

Note) ϕ : Diameter

	Ref. No.	Part No.	Description		部品名	Remarks	Common Model	Markets	ランク	
※	1	VE 82 01 00	Cassette Mechanism		カセットメカ	DECK B				
	2	NB 62 53 50	Housing Ass'y		ハウジング Ass'y		K-220			
	3	AA 60 88 70	Spring		ハウジングスプリング					
	4	NB 60 33 40	Dumper Ass'y		ダンパー Ass'y		K-200			
※	5	VE 82 03 00	Blind Plate		ブラインドプレート					
	6	CB 60 14 20	Plastic Rivet		プラスチックリベット					
	7	CB 65 28 80	Belt		ベルト		K-222			
	8	Ei 32 60 86	Binding Head Tapping Screw	2.6×8 FCRM3-BI	バインドタッピングネジ	PACK				
※	9	VE 82 02 00	Cassette Mechanism		カセットメカ	DECK A				
※	10	VE 74 90 00	Panel Unit		パネルユニット	Black KX-W202		R,A,B,G		
※	//	VE 74 91 00	//		//	// //		U,C		
※	//	VE 74 92 00	//		//	Silver //		R,A,B,G		
※	//	VE 74 93 00	//		//	// //		U,C		
※	//	VE 75 11 00	//		//	K-31				
	10-1	CB 63 47 20	Button		イジェクトボタン	Silver				
	//	CB 63 47 30	//		//	Black				
	10-2	AA 61 04 30	Spring		スプリング					
	10-3	PB 06 55 70	Tape Counter		テープカウンター					
	10-4	AA 62 97 80	Holder		カウンターホルダー					
	10-5	CB 06 88 80	Plastic Rivet		プラスチックリベット					
	10-6	CB 60 56 20	//		//					
	10-7	CB 64 24 90	Dumper		ダンパー					
	10-8	VA 26 22 00	Button		ボタン	Black				
	//	CB 65 42 30	//		//	Silver				
	10-9	AA 61 99 20	Spring		PBスプリング					
	10-10	CB 63 47 30	Button		イジェクトボタン	Black				
	//	CB 63 47 20	//		//	Silver				
	10-11	AA 61 99 30	Spring		EJスプリング					
※	11	NA 09 73 10	Main Circuit Board		メインシート					
※	12	NA 09 72 40	Power Transformer Ass'y		電源トランス Ass'y		KX-300	U,C		
※	//	NA 09 72 50	//		//		//	R		
※	//	NA 09 72 60	//		//		//	A,B		
※	//	NA 09 72 70	//		//		//	G		
	13	CB 61 68 10	Cord Stopper	CM-22A	コードストッパー			U,C		
	//	CB 62 01 90	//	CM-22B	//			R,A,B		
	14	VE 64 00 00	Power Cord Ass'y		電源コード Ass'y			U,C		⚠
	//	VE 22 29 00	//		//			R		⚠
	//	VE 04 29 00	//		//			A		⚠
	//	VE 04 31 00	//		//			B		⚠
	//	VE 04 34 00	//		//			G		⚠
	15	CB 63 42 80	Rod		ロッドP					
※	16	VE 81 87 00	Button		ボタン	Silver KX-W202				
※	//	VE 81 86 00	//		//	Black //				
※	//	VE 81 88 00	//		//	K-31				
	17	CB 65 71 10	Knob		ツマミ	Silver				
	//	CB 65 71 20	//		//	Black				
	18	CB 63 42 60	Knob Switch		ツマミスイッチ	Silver				
	//	CB 63 42 70	//		//	Black				
	19	CB 62 52 50	Lid Cover		リッドカバー					
	20	AA 62 87 70	Top Cover		トップカバー	Silver				
	//	AA 62 87 80	//		//	Black				
※	21	VE 81 82 00	Sub Panel		サブパネル	DECK A Silver KX-W202				
※	//	VE 81 81 00	//		//	// Black //				

※New Parts（新規部品）NR

	Ref. No.	Part No.	Description		部品名	Remarks	Common Model	Markets	ランク
※	21	VE 82 52 00	Sub Panel		サブパネル	DECK A K-31			
※	22	VE 81 92 00	〃		〃	DECK B Silver KX-W202			
※	〃	VE 81 91 00	〃		〃	〃 Black 〃			
※	〃	VE 82 51 00	〃		〃	〃 K-31			
	23	CB 06 88 80	Plastic Rivet		プラスチックリベット			R	
	24	CB 60 56 20	〃		〃				
	25	CB 60 92 60	〃		〃				
	26	Ei 03 01 06	Binding Head Tapping Screw	3×10 ZMC2-Y	バインドタッピングネジ	PACK			
	27	ED 03 00 66	Binding Head Screw	3×6 ZMC2-Y	バインド小ネジ	PACK			
	28	Ei 33 00 86	Binding Head Tapping Screw	3×8 FCRM3-BI	バインドタッピングネジ	PACK			
	29	Ei 33 01 06	〃	3×10 ZMC2-BI	〃	PACK			
	30	EV 41 30 36	Toothed Lock Washer	φ3 FCRM3-BI	歯付座金	PACK			
	31	EK 13 00 20	BW Head Screw	4×8 FNM3-3g	BWヘッド小ネジ	Silver			
	〃	EK 36 50 40	〃	4×8 FCM3-BI	〃	Black			
		CB 06 92 50	Binding Tie	BK-1	インシュロックタイ				
			Accessories		付属品				
		Mi 06 62 10	Pin Cord		ピンコード				
		VA 94 59 00	ST Connector	6P	STコネクター	K-31			

※New Parts（新規部品）NR

■ EXPLODED VIEW

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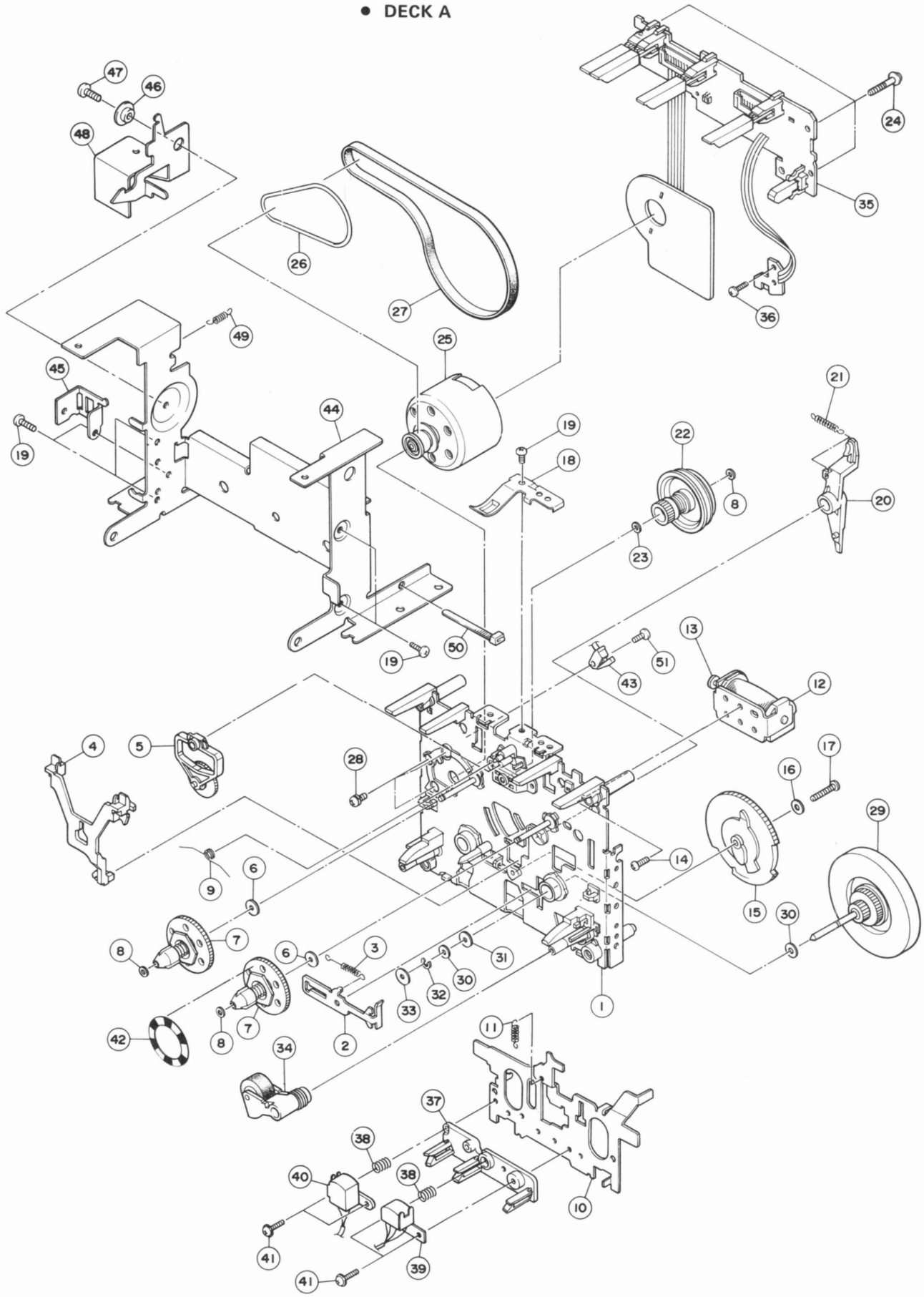

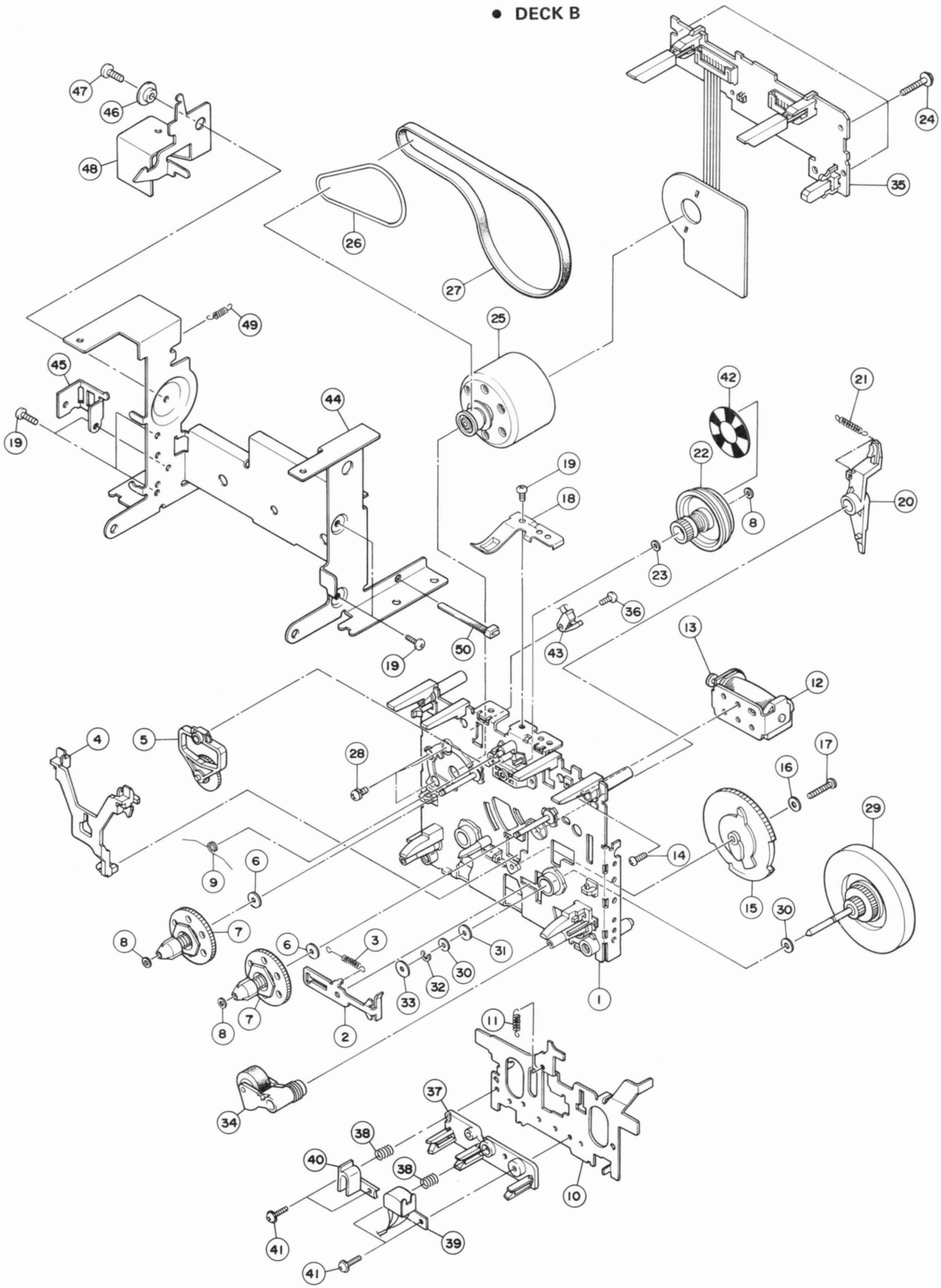
• DECK B
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■ MECHANISM PARTS

Note) ϕ : Diameter

	Ref. No.	Part No.	Description		部品名	Remarks/Markets	Common Model		ランク
※		***VE 82 01 00***	***Cassette Mechanism***		カセットメカ	DECK B			
※		***VE 82 02 00***	〃		〃	DECK A			
※	1	NX 60 18 90	Chassis		シャーシ準備品			F112-123	
※	2	AX 60 30 40	Cam Gear Plate		カムギヤ付勢板			FC48R-24	
	3	AX 60 03 40	Spring		カムギヤ付勢スプリング			FK26H-13	
※	4	AX 60 30 50	Hold Lever		ホールドレバー			FD40K-25	
	5	NX 60 08 30	Idler Ass'y		アイラード組立品			F017-048	
	6	XX 64 18 50	Washer	2.1×0.25T	ポリスライダー			UJ12V-11	
	7	XX 64 18 40	Reel Ass'y		リール組立品			F105-027	
	8	XX 63 66 10	Washer	1.7×0.25	ポリスライダー			FJ111-17	
※	9	AX 60 30 60	Hold Spring		ホールドSP			FK26R-13	
※	10	AX 60 30 70	Head Base		ヘッドベース			FC48U-32	
	11	AX 60 03 70	Head Base Spring		HBスプリング			FK26N-14	
	12	AX 03 03 80	Coil	PKA16145/AY	コイル			F265-252	
	13	XX 69 51 60	Plunger		プランジャー			PL366-11	
	14	XX 64 19 30	Screw with Washer	2.6×3.5	ワッシャー付ネジ			UG11S-14	
※	15	CX 60 35 60	Cam Gear (S)		カムギヤ(S)			FD40M-26	
	16	XX 64 17 80	Washer	ϕ2.0	平座金			MJ112-22	
	17	XX 64 17 70	Screw	2×13	ウェーブネジ			UG12H-20	
	18	AX 60 03 90	Spring		カセット押えバネ			FC49E-12	
	19	EJ 02 60 56	Pan Head Tapping Screw	2.6×5 ZMC2-Y	ナベタッピングネジ	PACK		KG194-29	
※	20	AX 60 30 80	Play Arm		プレイアーム			FD40L-23	
※	21	AX 60 30 90	Play Arm Spring		プレイアームSP			FK22G-11	
	22	NX 60 08 40	Clutch Ass'y		クラッチ Ass'y			FR20V-11	
	23	XX 69 74 00	Washer	2.1×0.13	ポリスライダー			FJ111-19	
	24	XX 68 53 20	Screw	2×13	ウェーブネジ			UG15U-11	
	25	JX 60 01 50	Motor		モーター準備品			F064-250	
	26	CX 60 17 50	Sub Belt		サブベルト			FF17H-13	
※	27	CX 60 36 00	Main Belt		メインベルト			FF16P-12	
	28	XX 69 74 10	Screw with Washer	2.6×5	ワッシャー付ネジ			FG114-14	
	29	NX 60 08 50	Flywheel Ass'y		F/W Ass'y			FR20T-13	
	30	XX 63 68 10	Washer	2.6×0.25	ポリスライダー			FJ111-30	
	31	XX 69 74 20	〃	2.6×0.25T	〃			UJ13V-11	
	32	XX 69 74 30	E-ring		Eガタトメワ			UG13U-12	
	33	XX 67 02 50	Washer	2.4×0.25T	ワッシャーオイルシール			FJ141-11	
※	34	NX 60 16 50	Pinch Roller Ass'y	2.5	ピンチローラー Ass'y			FR20L-11	
※	35	NX 60 19 00	Connector Ass'y		検出基板組立品	DECK A		F062-143	
※	〃	NX 60 19 10	〃		〃	DECK B		F062-144	
	36	AX 60 31 00	Screw	2×8	ウェーブネジ	DECK A		UG12H-12	
	〃	XX 69 74 40	〃	2×6	〃	DECK B		UG12H-26	
	37	XX 64 17 40	Head Spacer		ヘッドスペーサー			FD33C-11	
	38	XX 64 17 20	Spring		スプリングアジマス			FK21U-11	
※	39	GX 60 17 80	REC/PLAY Head Ass'y		録再ヘッド配線品	DECK A		F09-219	
※	〃	GX 60 17 90	〃		〃	DECK B		F09-220	
※	40	CX 60 35 70	Tape Guide		テープガイド	DECK A		FD30F-22	
※	〃	GX 60 18 00	ERASE Head Ass'y		消去ヘッド配線品	DECK B		F030-110	
※	41	AX 60 31 10	F Lock	2×9	Fロック			FG137-18	
※	42	AX 60 31 20	Reflection Plate		反射板	DECK A		UT18G-12	
※	〃	AX 60 31 30	〃		〃	DECK B		UT18G-16	
※	43	NX 60 19 20	Switch Ass'y		スイッチ組立品			F042-240	
※	44	AX 60 31 40	Mechanism Holder		メカホルダー			FC51G-11	
※	45	AX 60 31 50	Dumper Bracket		ダンパーBKT			FC51K-11	
※	46	BX 60 10 00	Spacer		スペーサー			FM296-11	

※New Parts (新規部品) NR

	Ref. No.	Part No.	Description		部品名	Remarks/Markets	Common Model		ランク
	47	EJ 03 00 66	Pan Head Tapping Screw	3×6 ZMC2-Y	ナベタッピングネジ	PACK		KG194-12	
※	48	AX 60 31 60	Eject Lever		EJECTレバー	DECK A		FC51H-12	
※	〃	AX 60 31 70	〃		〃	DECK B		FC51H-11	
※	49	AX 60 31 80	Eject Arm Spring		EJECTアームSP			FK22S-11	
	50	CB 06 92 51	Binding Tie		結束バンド	PACK		FH126-11	
※	51	AX 60 31 00	Screw	2×8	ウェーブネジ	DECK B		UG12H-12	

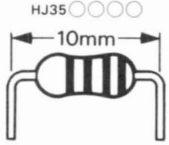
※New Parts（新規部品）NR

Parts List for Carbon Resistor

Value	1/4W Type Part No.	1/6W Type Part No.	Value	1/4W Type Part No.	1/6W Type Part No.
1.0 Ω	HJ353100	HF853100	12KΩ	HJ357120	HF857120
1.8 〃	HJ353180	※	15 〃	HJ357150	HF857150
2.2 〃	HJ353220	HF853220	18 〃	HJ357180	HF857180
3.3 〃	HJ353330	HF853330	22 〃	HJ357220	HF857220
4.7 〃	HJ353470	HF853470	27 〃	HJ357270	HF857270
5.6 〃	HJ353560	HF853560	33 〃	HJ357330	HF857330
10 〃	HJ354100	HF854100	39 〃	HJ357390	HF857390
15 〃	HJ354150	HF854150	47 〃	HJ357470	HF857470
22 〃	HJ354220	HF854220	56 〃	HJ357560	HF857560
27 〃	HJ354270	HF854270	68 〃	HJ357680	HF857680
33 〃	HJ354330	HF854330	82 〃	HJ357820	HF857820
39 〃	HJ354390	HF854390	91 〃	HJ357910	HF857910
47 〃	HJ354470	HF854470	100 〃	HJ358100	HF858100
56 〃	HJ354560	HF854560	120 〃	HJ358120	HF858120
68 〃	HJ354680	HF854680	150 〃	HJ358150	HF858150
82 〃	HJ354820	HF854820	180 〃	HJ358180	HF858180
100 〃	HJ355100	HF855100	220 〃	HJ358220	HF858220
110 〃	HJ355110	HF855110	270 〃	HJ358270	HF858270
120 〃	HJ355120	HF855120	330 〃	HJ358330	HF858330
150 〃	HJ355150	HF855150	390 〃	HJ358390	HF858390
160 〃	HJ355160	※	470 〃	HJ358470	HF858470
180 〃	HJ355180	HF855180	560 〃	HJ358560	HF858560
220 〃	HJ355220	HF855220	680 〃	HJ358680	HF858680
270 〃	HJ355270	HF855270	820 〃	HJ358820	HF858820
330 〃	HJ355330	HF855330	1.0MΩ	HJ359100	HF859100
390 〃	HJ355390	HF855390	1.2 〃	HJ359120	※
470 〃	HJ355470	HF855470	1.5 〃	HJ359150	HF859150
510 〃	※	HF855510	1.8 〃	HJ359180	HF859180
560 〃	HJ355560	HF855560	2.2 〃	HJ359220	HF859220
680 〃	HJ355680	HF855680	3.3 〃	HJ359330	HF859330
820 〃	HJ355820	HF855820	3.9 〃	HJ359390	※
910 〃	HJ355910	HF855910	4.7 〃	HJ359470	HF859470
1.0KΩ	HJ356100	HF856100			
1.2 〃	HJ356120	HF856120			
1.5 〃	HJ356150	HF856150			
1.8 〃	HJ356180	HF856180			
2.0 〃	HJ356200	HF856200			
2.2 〃	HJ356220	HF856220			
2.4 〃	HJ356240	HF856240			
2.7 〃	HJ356270	HF856270			
3.0 〃	HJ356300	HF856300			
3.3 〃	HJ356330	HF856330			
3.6 〃	HJ356360	HF856360			
3.9 〃	HJ356390	HF856390			
4.7 〃	HJ356470	HF856470			
5.1 〃	HJ356510	HF856510			
5.6 〃	HJ356560	HF856560			
6.8 〃	HJ356680	HF856680			
8.2 〃	HJ356820	HF856820			
9.1 〃	HJ356910	HF856910			
10 〃	HJ357100	HF857100			

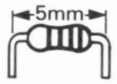
1/4W Type

HJ35○○○○



1/6W Type

HF85○○○○



KX-W202/U/K-31

YAMAHA

YAMAHA® TECHNICAL BULLETIN
ELECTRONICS CORPORATION, USA

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REVISED

No. 126H
Effective Date: JANUARY 6, 1989

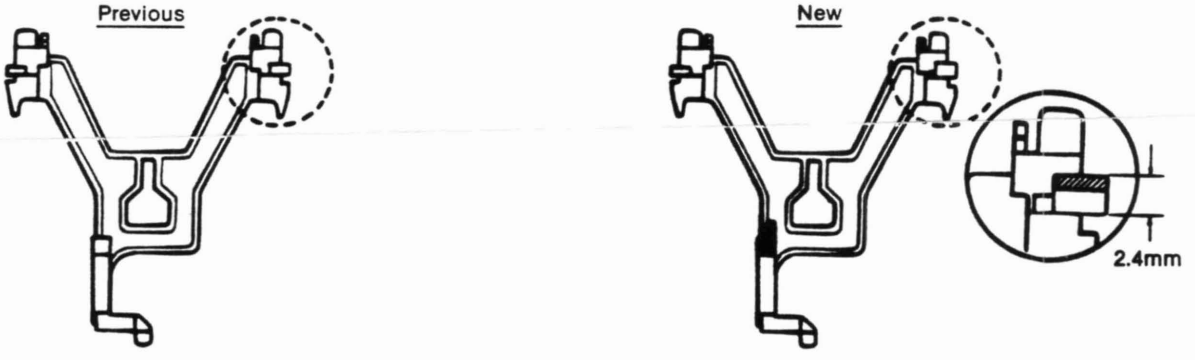
MODEL: KX-W 202
SERIAL NUMBERS AFFECTED: EO24518OQ and below
PO42018PR and below
FUNCTIONS AFFECTED: Transport Mechanism

TYPE OF CHANGE

MANDATORY	OPTIONAL	FOR INFO ONLY
☐	☐	☒

SYMPTOMS: In the play mode, the head mechanism will drop down and not lock into the play position.

CAUSE: The hold lever of the cassette mechanism has become deformed due to heat.

SOLUTION: Replace the hold lever (new design, with same part number AX603050). The thickness of the stop detection position is changed from 2.1mm to 2.4mm as shown below.

▨ These areas have increased thickness